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ABSTRACT

As part of a larger study of the success and problems of women as applicants to and students in the schools of eight health professions, the study of osteopathic medicine involved interviews with administrators, faculty, and medical students. Its central purpose was to identify any characteristics of the profession--in its history, organization, and any other important features--that might contribute to an understanding of the role and status of women in it, and the barriers faced by women in the profession's schools. An introduction to the profession of osteopathy gives a sense of its history, work, focus, organization, and women's status in it. Included in addition are a short set of recommendations for the schools and associations, and direct quotes from the interview, giving a vivid description of some of the unique problems encountered by women in osteopathy. Some statistical tables are included. (MSE)

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AN EXPLORATORY STUDY OF WOMEN IN THE HEALTH PROFESSIONS SCHOOLS

VOLUME III: OSTEOPATHIC MEDICINE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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WOMEN'S ACTION PROGRAM
Department of Health, Education, and Welfare

EXPLORATORY STUDY OF WOMEN IN THE HEALTH PROFESSIONS SCHOOLS

VOLUME III: WOMEN IN OSTEOPATHIC MEDICINE

Prepared for

The Women's Action Program
Office of Special Concerns,
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Prepared by

URBAN AND RURAL SYSTEMS ASSOCIATES (URSA)
Pier 1-1/2, San Francisco, California 94111

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The opinions and conclusions expressed in this report are URSA's and do not necessarily reflect those of the Department of Health, Education, and Welfare.

The schools accept every woman they interview. It's much easier for women to get in than for a man, and most of them won't even practice. (First year student, male)

Women bring a lot...on a person to person basis our women are our best students for a couple of reasons for that... one, they are a highly selected group when they apply; there's a selecting out process that occurs. Another factor--I'm convinced that we don't get our fair share of female applicants. We had...out of our total applicants, I think about 9% were female applicants, and of that group we accepted about 17%. Certainly, on that basis, you can get in easier than a male, but by the same token, the total women applicants would probably be better than the random selection of the same number of men...academically. (Chief Administrator, male)

The interviewer said, 'Do you realize that if we give you a seat in this medical school, you're taking it away from a man?' Look at all those men taking seats away from me!!! I knew right then that I was going to have to defend my right to be there. (Second year student, female)

PREFACE

The Exploratory Study of Women in the Health Professions Schools was conducted by Urban and Rural Systems Associates (URSA) for the Women's Action Program (WAP) of the Department of Health, Education, and Welfare (HEW) under Contract Number HEW-OS-74-291. The study focuses on eight health professions generally known and referred to as the MODVOPPP professions: medicine, osteopathic medicine, dentistry, veterinary medicine, optometry, podiatry, pharmacy, and public health.

Study Purpose

The study's central tasks have been to identify and explore the barriers to success which women face as MODVOPPP school applicants and students and to describe the discrimination process, if any, which limits women's entry into these health professions. Its central purpose--indeed its primary product--has been the development of conceptual models of the recruitment, admissions, and education systems designed to maximize equal opportunities for women and to encourage their success as school applicants and students in the MODVOPPP professions. The models are the basis for guidance and recommendations intended to assist HEW, the MODVOPPP educational and professional associations, the MODVOPPP schools, and appropriate others to eliminate barriers women face and/or to minimize their impact.

Study Design and Methods

The study was purposefully exploratory in its design. According to the Request for Proposal (RFP) which resulted in the contract, "The exploratory approach taken for this study is based upon the realization that not enough is known about the process of discrimination to permit more systematic research, or to assess alternative forms of intervention designed to achieve equal opportunity based on sex." A common purpose of exploratory studies is to identify and raise issues important to an understanding of a topic under investigation. The power of exploratory research is to illuminate issues in settings and systems which are complex and where simple variables and variable clusters are inadequate

to explain and establish causal relationships. Thus exploratory studies do not normally test hypotheses, they generate them. Their purpose is not to quantify the frequency, magnitude, or distribution of events or phenomena, nor do they measure statistical correlations among events or between events and characteristics of people, institutions, professions, or other categories of systems variables. Rather their purpose is often to define complex systems through descriptive or predictive models which may be subjected to a variety of tests or evaluations in subsequent stages of research. This study's goal of developing success models for women as applicants to and students in the MODVOPPP health professions schools was thus the basis for selecting an exploratory study design.

URSA implemented the design by collecting and analyzing extensive data about the MODVOPPP professions and schools and other pertinent topics and issues. Information was gathered from the following sources:

- Interviews with almost 600 individual MODVOPPP school administrators, faculty members, and students in 27 MODVOPPP schools around the country. These were open-ended, purposefully unstructured interviews designed to surface the widest possible range of issues from a broad spectrum of respondents. They were supplemented by over 60 group interviews in which an estimated 440 men and women students participated.
- Interviews and correspondence with staff members of the professional association, student association, women's professional association, and/or association of schools and colleges in each of the MODVOPPP professions.
- Written documents prepared by and collected from the MODVOPPP schools and associations such as recruitment brochures, school catalogues, financial aid (loan and scholarship) programs and policies, school admissions committee procedures, descriptions and instructions for use of centralized application services, and so on.
- The professions' various current and, when available, historic journals.

- Available statistics on the professions' practitioners, schools, applicants, and students.
- Interviews, correspondence, and meetings with individuals and groups conducting special studies and research in and about the professions, about women in the professions, sex role behavior and learning, and other related topics; and surveys of available studies, research, and relevant literature in these areas.
- Interviews, correspondence, and meetings with representatives of HEW health policy and program agencies and reviews of pertinent federal legislation, regulations, guidelines, and other documents related to health education policy and programs.

All of this information was subjected to qualitative forms of analysis intended to identify conflict and consensus among various sources of information regarding barriers women face as MODVOPPP applicants and students and to identify exemplary policies and programs sponsored by MODVOPPP schools and associations which appeared to eliminate and/or minimize the impact of these barriers. These analyses were the basis for developing the recruitment, admissions, and education models called for by the contract.

Scope of Study Research: Variations Among the MODVOPPP Professions

MODVOPPP students and schools are all designated as potential recipients of federal financial aid under the Comprehensive Health Manpower Training Act of 1971 (PL 92-157) Public Health Service Act; and schools receiving assistance under the Act are subject to its Title VII affirmative action and non-discrimination requirements.

Inclusion in this Act is the common basis on which the MODVOPPP professions were included in this study. Beyond this common feature, however, and the obvious fact that the MODVOPPP professions are all health professions, preliminary study research suggested that in many significant ways the professions are more different than they are similar and that these differences might have great significance for women as applicants to and students in the schools. The

MODVOPPP professions vary greatly in size, for example, with the largest, medicine, having well over 300,000 active practitioners and the smallest, podiatry, having barely more than 7,000. This variation also appears in the number of operational training institutions with medicine having over 100 schools and podiatry only five. The professions differ in public visibility and general knowledge. Everyone knows of doctors, dentists, and veterinarians and knows generally what they do. Not everyone knows what DOs (doctors of osteopathic medicine) or podiatrists are or what they do. Some of the professions are clearly defined as and accorded the social status and other rewards of a profession while others, in the public view, may be more often thought of as a good occupation or a good business. To some extent varying public definitions of profession vs. occupation vs. business reflect different practice patterns and organization. Some of the professions--for example, optometry--are more often practiced in entrepreneurial business forms such as solo or partnership practice than others such as public health which includes opportunities for practice in schools, hospitals, health departments, and other employer institutions.

Variations in professional training are also great. A first professional degree sufficient for practice is possible in some sections in public health within a year; in medicine the minimum is normally five years and the average, depending on specialty selection, much longer. Cost of training varies. Entry requirements to the schools vary. Curriculum content and structure among professions vary.

Finally, and most obviously, the presence of women as practitioners and as students, both historically and currently, varies enormously among the eight MODVOPPP professions, and some are much more heavily sex-typed than others. In pharmacy, for example, about 9% of the active practitioners were women in 1970; however, increasing enrollments of women in schools of pharmacy resulted in women representing 24% of first year enrollments in 1970-71. By contrast, women represented only 3% of active dentists in 1970 and only 2% of first year enrollments in 1970-71.

These most obvious differences among the professions--and others not so obvious--led the URSA study team to conclude that a portion of our research effort must be devoted to an examination of each of the MODVOPPP professions singly and as a separate and distinct social system with its own particular history, forms of practice, professional and training institutions, and practitioners and students. The purpose of conducting eight "mini-studies" on the MODVOPPP professions was to identify any characteristics of each profession--its history, organization, and other important features--which might contribute to an understanding of the role and status of women in that profession and to an identification of the barriers women face as applicants to and students in the profession's schools.

Organization and Contents of the Final Report(s)

As a result of our decision to conduct these studies of each MODVOPPP profession, the study's findings, conclusions, and recommendations are reported in a ten-volume final report. The ten volumes are:

VOLUME I:	Part 1:	DATA ANALYSIS, FINDINGS, CONCLUSIONS, RECOMMENDATIONS
	Part 2:	APPENDICES
VOLUME II:	MEDICINE	
VOLUME III:	OSTEOPATHIC MEDICINE	
VOLUME IV:	DENTISTRY	
VOLUME V:	VETERINARY MEDICINE	
VOLUME VI:	OPTOMETRY	
VOLUME VII:	PODIATRY	
VOLUME VIII:	PHARMACY	
VOLUME IX:	PUBLIC HEALTH	
VOLUME X:	ANNOTATED BIBLIOGRAPHY	

VOLUME I includes a discussion of the study's major findings regarding barriers women face as applicants to and students in the MODVOPPP professions. It presents the recruitment, admissions, and education models which are designed to eliminate those barriers. It suggests a series of further research and action

recommendations for attention by HEW, the MODVOPPP professional and educational associations, and the MODVOPPP schools. VOLUME I also presents a detailed description of the study's methods.

The several Appendices to VOLUME I include samples of the study's data collection and analysis instruments; a summary of the major issues raised by men and women students in group interviews; financial aid sources, policies, and problems students experience; a survey of the roles and status of women in the MODVOPPP professional associations; statistical tables used by the URSA study team in conjunction with field interview and document review data; and a discussion of data gaps confronting the researcher in the MODVOPPP health professions with recommendations regarding data needs. In this regard, it is important to note and to stress that both the relative absence of minorities in the MODVOPPP schools and professions coupled with the absence of statistical data about applicants, students, and practitioners available by both race and sex simultaneously has necessarily limited the findings and conclusions in this study to Caucasian women. To prevent such research limitations in the future, one of our most urgent data recommendations is that statistical data always be made available and presented by both minority status and sex together rather than singly.

VOLUMES II-IX, the individual MODVOPPP professions reports, are designed to serve as a brief introduction to each profession--an introduction which gives a sense of the profession's history, work focus, organization, and women's roles and status in it. The study's ANNOTATED BIBLIOGRAPHY, VOLUME X, includes a list of the major bibliographic sources used in our research and preparation of all of the study's reports.

Taken as a group, the eight individual professions' studies and reports include the bulk of the total study's findings and are the collective basis for the conclusions and recommendations presented in VOLUME I, DATA ANALYSIS, FINDINGS, CONCLUSIONS, RECOMMENDATIONS. Under optimal circumstances, each individual profession's report should be read in combination with and after VOLUME I. However, in anticipation of the possibility that individual profession's

volumes may be read alone, there is a certain amount of repetition and duplication of information among the eight professions reports and between them and VOLUME I.

In addition to serving as an introduction to each profession, VOLUMES II-IX also have two other purposes. First, each of the individual reports includes a short set of recommendations designed to address some of the problems women experience which are unique or particular to the profession and which are best considered for implementation by either the schools directly or by the profession's various key associations.

Second, the extensive use of direct quotes from our field interviews with administrator, faculty, and student respondents in school site visits provides a vivid description of women students' experiences in the male-oriented environments of the MODVOPPP health professional schools; the extent to which these experiences are unique to women and not shared by male students; and the extent to which these experiences serve as barriers to women as applicants to and students in the schools. Collectively these reports of women's experiences also demonstrate that in spite of the very real and significant size, structural, work, and practice differences among the eight MODVOPPP professions, women's experiences in these professions and their schools are more similar than they are different in many important ways.

WOMEN IN OSTEOPATHIC MEDICINE

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I. OVERVIEW

Osteopathic medicine was one of many competing medical philosophies which were widely practiced in this country during the 18th and 19th centuries, but it is the only major one to survive allopathic medicine's consolidation of power and dominance in providing medical care since the turn of the century. Osteopathic medicine shares much diagnostic and therapeutic technology in common with allopathic medicine, but it differs in its approach and philosophy toward disease and health states of the body. Osteopathic medicine emphasizes the relationship between the musculo-skeletal and organ systems and functions of the body, and it is based on a philosophy of treating the patient as a total unit.

In dealing with illness and injury, osteopathic medicine makes major use of manipulative therapy, combining it with the use of drugs, operative surgery, physical therapy, and other methods depending on the individual diagnosis. The osteopathic physician believes that all body systems are interdependent, and a disturbance in one causes altered functions in other systems of the body. This interrelationship is affected through the nervous and circulatory systems. The musculo-skeletal system makes up over 60% of the total body mass and, therefore, is used as one system that is affected by and can affect disease in other body systems. This concept requires a thorough understanding of anatomy and the development of special skills (which are not necessary in allopathic medicine) in recognizing and correcting structural problems through manipulative therapy. In addition to an understanding of the interrelationships of the body systems, external factors are always considered in diagnosing and treating disease: age, weight, sex, occupation, emotional disturbances, and so on.

Because of this emphasis on the body as a total unit and the patient as a total person, the profession sees itself as a primary care field and the majority of osteopathic physicians enter general practice with a small (but growing) minority specializing. This is the reverse of the pattern for MDs: 78% of DOs are in general practice while only 25% of MDs are in that type of practice. (4:4) In referring to the two branches of medicine--allopathic and osteopathic--we will make the distinction between a DO (Doctor of Osteopathic Medicine) and an MD, referring to both as physicians.

Osteopathic medicine is a small, regional, not very well-known profession. At present approximately 14,000 DOs are in practice as compared to more than 300,000 MDs. About half of the DOs are concentrated in seven states, largely in the Midwest, and many are located in rural and semi-rural areas. The geographic distribution of osteopathic physicians is heavily influenced by the location of the profession's colleges and hospitals and by the licensing requirements and practice restrictions in various states. Nine colleges train young people to become DOs as compared to the over 100 schools which train MDs.

Throughout this century osteopathic medicine has had to struggle for survival and full professional recognition from the public, often in the face of intensive opposition from organized allopathic medicine. This struggle has resulted and continues to result in conflict and disagreements among the profession's practitioners and academicians regarding its future and its relationship to allopathic medicine. While many of the profession's members view these conflicts as a serious internal weakness in the profession, much about osteopathic medicine represents a potential future strength given certain trends and concerns in medical care today.

The profession's traditional emphasis on the whole patient and its approach to care based on a recognition of the interrelationships of major body systems and functions resembles current approaches to medicine which are increasingly popular among young physicians. Its emphasis on primary care and rural practice makes osteopathic medicine a profession whose potential importance may be disproportionate to its current size given today's concerns with both the specialty and the geographic maldistribution of most allopathic physicians. Some of the profession's newest members recognize these assets and bring to the profession a sense of mission and enthusiasm which may well make its immediate future more secure than its immediate past has been.

II. BRIEF HISTORY OF THE PROFESSION

MAIN ISSUES

Osteopathic medicine began in the United States in the mid 1800s as a reform movement against what was considered by Dr. Andrew Taylor Still, its founder, as the "primitive and limited armamentarium of drugs and surgical techniques" represented by the accepted allopathic medical profession. Still is portrayed by the profession as a rugged, humanitarian individualist who, as a Civil War physician, was appalled by the number of patients for whom nothing could be done, or whose lives were drastically changed by the wanton use of surgical amputation or drug dependence. Seeking new approaches to medical care, Dr. Still began an intensive study of the body's muscular and skeletal systems, exploring the concept of the whole person and the body as a total system. He grew to believe that the body could heal itself internally if corrected externally. These principles were in direct opposition to the dominant methods of medical practice, and Still's ideas were ridiculed or ignored. Still approached the existing medical colleges, but after repeated rejections he set up his own college of "osteopathic" medicine in 1892 in Kirksville, Missouri, where he trained a small group of physicians and gave them a Doctor of Osteopathic Medicine degree.

The history of building the osteopathic profession has, from the beginning, been in direct opposition to the allopathic medical establishment. Osteopathic medicine founded its own national and state organizations, established and financed its own colleges and hospitals, and fought state by state for legal recognition and the right to practice. This history is very important to modern DOs, and the profession is currently involved in a struggle between those who would like to minimize the differences between the two branches of medicine and those who wish to maintain osteopathic medicine's separate identity and control. The latter group of DOs take great pride in aligning themselves with the "outsider, reform" image of its founder, and they speak of themselves as following a tradition of fighting the medical establishment to increase the quality of health care services and to provide a "more human and more complete" approach to health care.

The disagreements and conflict between osteopathic medicine and the American Medical Association (AMA) and the allopathic medical establishment have historically contributed to the profession's relatively low public status compared to allopathic medicine, to its low visibility, and to common misunderstandings about it. It was not until World War II that DOs became recognized as equal practitioners with the better known MDs. Because DOs were not drafted into the military medical services, the war-time doctor shortage was filled to a large extent by DOs and, as a result, DOs gained public acceptance. Of great importance was the fact that a majority of the osteopathic physicians were general practitioners, whereas increasing numbers of MDs specialized. At that time, the federal government blurred the distinctions between the two branches of medicine in an effort to provide desperately needed health care. This period was responsible for giving osteopathic medicine higher status, more visibility, and expansion as a profession. In 1973, Mississippi was the last state to finally grant DOs full license to practice, making it possible for DOs to work in any state of the union.

A current and important issue for the osteopathic profession is whether and how closely to ally with the American Medical Association (AMA). There have been attempts on the part of the AMA and some DOs within the American Osteopathic Association (AOA) to combine the two associations. The presidential acceptance address by this year's AOA President responds to these tendencies:

> I need not remind you that it is not for our similarity to the larger and better known school of medicine that we have flourished, but rather for our unique contributions to medical science. If we offer nothing more than allopathic medicine, how can we justify our existence (and control) as a separate school of medical practice and healing? Obviously we can't. (6:25)

He speaks of working during his term of office towards:

> An acceleration of efforts to obtain legislation enabling osteopathic medicine to receive separate consideration as to hospital expansion, new beds and so forth under existing certificate of need legislation, towards continuing recognition of the role of general practice as the bulwark of the profession and against the bite of increasing interference from the government, both federal and state, third party carriers and consumers. (6:25)

The new president clearly represents that wing of the profession which wishes to maintain a separate identity and control and wants to preserve the tradition of a rural, general practice physician.

This split between those who would align closely with allopathic medicine and those who want independence from it is a survival response to how best to maintain osteopathic medicine as a profession. To expand and survive, osteopathy must provide a range of services competitive with those provided by the allopathic profession. It must provide specialty care as well as general care; it must provide hospitals with expensive technological advances only made possible by federal grants and support. However, to justify its existence as a profession separate from allopathic medicine, it must also emphasize its differences.

HISTORY AND EXPERIENCE OF WOMEN IN THE PROFESSION

In the early days when osteopathic medicine was still primarily rural and Midwestern and maintained an image as a radical, alternative form of medicine, between one-fourth and one-half of Dr. Still's students were women. During the late 19th century the profession was often a family profession with daughters or sons and husbands and wives carrying out the work. As Dr. Still's radical personality ceased to be the central rallying strength of the profession, and as the profession's separatist, alternative bent began to fade, fewer women enrolled in the schools. By the end of the 19th century they had all but disappeared. The disappearance of women from schools of osteopathic medicine was coincidental with the triumph of allopathic medicine and the near disappearance of the alternative medical professions. (2) Figures on the number of women enrolled in schools of osteopathic medicine are not available for much of this history.

Women have been represented in very small numbers in schools of osteopathic medicine in recent decades. In the last decade, however, the proportion of women students has begun to increase, as it has in other MODVOPPP professions (see Table 1 on page 6).

TABLE 1

FIRST YEAR FEMALE ENROLLMENTS IN MODVOPPP HEALTH PROFESSIONS SCHOOLS AS AVAILABLE FOR ACADEMIC YEARS 1968-69 THROUGH 1974-75

(BY PERCENT)

PERCENT WOMEN FIRST YEAR ENROLLMENT	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY[a]	PODIATRY[b]	PHARMACY	PUBLIC HEALTH
1968-69	9.0%	4.0	0.9	9.0	-	-	20.1	N/A
1969-70	9.1%	2.4	1.3	10.9	2.5	-	22.7	N/A
1970-71	11.1%	2.7	2.1	10.1	3.7	2.5	23.7	N/A
1971-72	13.7%	4.3	3.1	15.3	5.3	2.0	25.8	N/A
1972-73	16.8%	6.9[c]	4.2	18.0	7.9	2.3	27.7	N/A
1973-74	19.7%	9.0	7.2	22.8[d]	11.3	4.0	29.0[e]	N/A
1974-75	22.2%[f]	10.9[f]	11.2[f]	24.4[d]	-	4.8	-	47.0[g]

SOURCE: *Minorities and Women in the Health Fields, Bureau of Health Resources Development, Health Resources Administration, Public Health Service and Department of Health, Education and Welfare, 1974 except:*

[a] *Unpublished statistical tables from the American Optometric Association, St. Louis, Missouri.*

[b] *Unpublished data from the American Association of Colleges of Podiatric Medicine, Washington, D.C.*

[c] *Journal of the American Osteopathic Association, Education Annual, 1974.*

[d] *Unpublished data from the American Veterinary Medical Asscciation Association, Chicago, Illinois.*

[e] *American Journal of Pharmaceutical Education, "Report on Enrollment in Schools and Colleges of Pharmacy, First Semester, Term or Quarter, 1973-74", 1974.*

[f] *Women in Health Careers: Status of Women in Health Careers in the United States and Other Selected Countries, Chart Book for International Conference on Women in Health, The American Public Health Association, 1975.*

[g] *Association of Schools of Public Health; estimate since some unknown; excludes Puerto Rico*

Excepting podiatry, the increase in the number of women enrolled in the first year class has been lower over a six year period than any other MODVOPPP profession. In addition, again excepting podiatry, osteopathic medicine now claims the smallest percentage of women, although in 1968 it had a higher percentage than podiatry, dentistry, or optometry. Possible explanations for this include:

- Podiatry and osteopathic medicine as the least visible and least known of the MODVOPPPs have attracted fewer of the women who, in recent years, have been applying to the other health professions.
- Podiatry and osteopathic medicine as professions that are striving for legitimacy and recognition are less willing to accept applicants who might be risks--for example, women.
- Osteopathic medicine as one of the more conservative professions still holds many of the older stereotyped beliefs regarding the proper role of women in our society.

Total enrollment figures also show overall increases in women students but show osteopathic medicine well below pharmacy, veterinary medicine, and medicine. In 1973-74, less than 10% of all students in schools of osteopathic medicine were women, while nearly 30% were women in schools of pharmacy, 20% in veterinary medical schools, and nearly 20% in medical schools (see Table 2 below).

TABLE 2

TOTAL FEMALE ENROLLMENT IN MODVOPPP HEALTH PROFESSIONS SCHOOLS: 1968-69 THROUGH 1974-75 (By Percent)

YEAR	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH
1968-69	8.8%	2.8	1.1	7.6	-	-	18.2	N/A
1969-70	9.0%	3.0	1.1	8.8	2.9	0.9	20.8	N/A
1970-71	9.6%	2.8	1.4	9.3	2.9	1.4	21.9	N/A
1971-72	10.8%	3.4	1.9	11.5	3.6	1.3	24.9	N/A
1972-73	12.8%	4.5	2.8	13.6	5.1	1.5	26.5	N/A
1973-74	15.4%	6.5[a]	4.3	17.6	7.3[a]	2.4	28.3[a]	N/A
1974-75	18.0%[a]	8.5[a]	6.8[a]	20.3[a]	9.4[a]	3.2[a]	-	45.8[b,c]

SOURCE: *Minorities and Women in the Health Fields, Bureau of Health Resources Development, Health Resources Administration, Public Health Service and the Department of Health, Education and Welfare, 1974, except:*

[a] *Women in Health Careers: Status of Women in Health Careers in the United States and Other Selected Countries, Chart Book for International Conference on Women in Health, The American Public Health Association, 1975.*

[b] *Masters and Doctors degrees combined*

[c] *Associations of Schools of Public Health, DPH or DrPH; excludes University of Puerto Rico.*

III. THE PROFESSION TODAY

CHARACTERISTICS OF THE PROFESSION

Osteopathic medicine suffers from the fact that it is virtually unknown in many areas of the United States, and those who are familiar with it tend to consider it primarily a form of manipulative therapy such as chiropracty. Among those who are familiar with the profession (people who were/are treated by DOs or who live in certain areas of the Midwest where DOs are more visible and accepted), osteopathy has the image of a less established but more human medical profession than does allopathic medicine. The image seems to include the following:

- a primary care profession
- a folksy, warmer approach to patients than MDs
- less status than MDs and, as a consequence, some public insecurity about what a DO can and can't do or knows and doesn't know, compared to MDs
- a more approachable profession than allopathic medicine
- a regional profession (Midwestern)
- a profession serving primarily poor or rural populations
- a "calling"
- a practical profession
- a conservative profession

These images of osteopathic medicine came up in interviews with both students and practitioners about their experiences with people outside the profession. For example:

> *Whenever I tell people I'm becoming a DO, they look at me with a blank stare. They think we're like chiropractors or some kind of quack. (Student, male)*

Although some students complained about the general public's relative ignorance of their profession, two other students talked about their views of the caring image of the profession:

One of the reasons I knew I wanted to be a DO was because my family had always gone to one, and he really cared about his patients and took time to get to know all of us, and we really got the impression that that's what DOs are--warm caring, family doctors. (Student, female)

People get so intimidated by MDs, you know, they're afraid to ask questions and they go and wait and then get pushed through the mill. But people are more comfortable with DOs, you know, we're less high and mighty. (Student, male)

Most of the women students we interviewed in this study gave as a primary reason for choosing a MODVOPPP health profession a desire to help people. The image of osteopathic medicine as a primary care, warm, humanistic profession would seem to be an attractive one for women. (See section below on Osteopathic Students, Attractions and Routes to the Profession.)

Although specialty training is available and the osteopathic profession needs specialists to offer a full range of health services, this is still principally a primary care, general practice profession. This means that DOs work in their own offices or in small clinic facilities and have ties with a local or regional osteopathic hospital. A strong professional association network means that even though DOs may work in their own isolated offices, they do have institutionalized forms of collegial communications. To the extent that women have more difficulty setting up a business or their own practice, the solo practice emphasis of the profession may be a detriment to women. However, osteopathic medicine is usually community based so the kind of isolation associated with solo practice in dentistry is not a problem for DOs, and many women in the profession work in small group practices.

OSTEOPATHIC HOSPITALS

The osteopathic profession has its own hospitals by choice and also by necessity. The profession built them since, with few exceptions, DOs were denied staff privileges in medical hospitals and also because they wanted to work in environments supportive to osteopathy as a profession in its own right. Court cases and federal legislation establishing osteopathy as on a par with the medical profession have worked to break down barriers, and now there are about 400

allopathic hospitals in the country with a mixed staff including members of both professions and approved by the Joint Commission on Accreditation of Hospitals. Most DOs, however, practice in strictly osteopathic hospitals.

There are approximately 200 osteopathic hospitals in the United States with more than 23,000 beds. The number of beds available has increased by about 1,000 each year for the past ten years. There are osteopathic hospitals in 30 states admitting approximately 900,000 patients annually. The size of the hospitals varies greatly from small town clinics to large metropolitan facilities. The minimum size for accreditation by the AOA is 25 beds. In areas of the country which do not have osteopathic hospitals available, patients go to hospitals administered by MDs where their own doctors, DOs, have privileges. In 17 states where the osteopathic profession is strong, it is illegal to bar a DO from the staff of a hospital on the basis of the degree, but in the remaining 33 states it is up to the discretion of the hospital administration to determine whether to allow a DO to use the facilities.

The bulk of financing for osteopathic hospital construction, expansion, and administration comes primarily from within the profession and from other private sources. Recently, along with other governmental recognition and support that has boosted the profession's public legitimacy, state and federal funding has been made available through the Hill-Burton Act of 1948 specifically to build osteopathic institutions.

At this time, 183 hospitals are members of the American Osteopathic Hospital Association. Historically osteopathic hospitals were founded not out of community demand but by a surgeon or physician who needed a special facility in which to do work. As there were seldom community drives and no large allocations of federal monies for the construction or development of osteopathic hospitals, they have a tradition of being closely owned and controlled by the physicians themselves and by the profession's relatively tight network of practitioners. If an editorial in The Osteopathic Hospital is an indication of the general mood of the osteopathic physician/hospital administrator, there is a resistance to accept federal monies for fear of losing the profession's tight control on its hospitals. (5:4) In spite of this, all AOA approved hospitals are automatically enrolled in Medicare. (1:13)

DOs have the freedom to control the amount and extent of their practice time, but for most it is a full-time professional calling. Like MDs, a sense of life and death responsibility for their patients (enhanced by the fact that so many DOs are in private solo practice) creates a professional who must always be on-call and ready to put patients first. Although DOs are now fully licensed in every state of the union, mobility is not an issue. Most students plan to go back to their hometown communities to practice, partly because the profession's philosophy includes an emphasis on returning to and practicing in one's community. As long as this emphasis is present, the profession will maintain itself as a regional profession.

IV. PROFESSIONAL EDUCATION

CURRENT TRENDS AND ISSUES, DIRECTIONS, AND MAJOR CHANGES IN PROFESSIONAL EDUCATION

Changes in professional education follow the trends in the profession as a whole. As osteopathic medicine has become more public and has attempted to provide a full range of alternatives to allopathic medicine, two changes have had to be made in the training:

- a growth of specialty training
- the beginning of publicly supported schools of osteopathic medicine

Growth of Specialty Training

Osteopathic medicine now offers specialty training in all of the areas that allopathic medicine does. However, licensure as an osteopathic specialist requires completion of an American Osteopathic Association (AOA) approved residency. The AOA has purposely limited the number of these residencies to keep the profession's primary care emphasis. This means that few students can opt for the specialties and this, so far, seems to have prevented the development of a status hierarchy of specialties such as that which pervades allopathic medicine.

Students we interviewed talked about the problems of wishing to specialize, but such a limited number of AOA-approved residencies exist that many students who might want them cannot get the training. It is possible to get an American Medical Association (AMA) approved residency in a non-osteopathic hospital, but this training is not recognized by the AOA for licensure. To the extent that the AOA residencies are highly competitive and that it is popularly believed that women may not fully utilize their training, it may be harder for women to gain access to the profession's specialty training opportunities.

Publicly-Supported Schools of Osteopathic Medicine

Publicly-supported schools of osteopathic medicine have emerged as a result of pressure from osteopathic associations on state legislatures and because of state legislators' desires to provide primary care physicians for underserved areas. The significance of public support for the profession--aside from public legitimacy--is that it is a step away from the profession's tight control over its schools. A Chief Administrator talked about the significance of this new trend towards publicly supported schools in osteopathic medicine:

> [There is now] *a revolution within the profession. I think osteopathic colleges are moving into the main stream of education. It has been shown that state support is a possibility* [and now] *even those of our schools that are not completely state supported...are receiving state funding in one form or another...Perhaps the most important contributions made for the osteopathic profession are, number one,* [it has been] *shown that a college of osteopathic medicine can be placed against professional schools along side of them. Professional schools with longstanding traditions can stand with university-based education under the same rubric. An osteopathic school can function just as effectively, perhaps even more so...and can produce a product qualitatively as an equal (perhaps in some respects better than they can) and that this can be done without a loss of identity to the college of osteopathic medicine...without being swallowed up...which does something to help alleviate some of the insecurities felt by any minority group, whether it be a profession or an individual. Number two, I think the important thing done is to show that you don't have to be afraid to reach outside of the profession and bring in individuals who do not have the DO degree to assist you, to do whatever job you have to do, help in the funding and the decision making. It may not sound like much, but in the osteopathic profession, that's a really important achievement.*

THE ORGANIZATIONAL TRAINING NETWORK

Unlike most of the other MODVOPPP professions, the osteopathic medical profession has, for so long, been the sole force and authority in training that the professional organizational network is synonymous with the educational training network.

The American Osteopathic Association, founded in 1897, is the national association of practicing DOs. Membership in the AOA is voluntary--no DO is required to join in order to practice. There are definite criteria and prerequisites for membership, however. The AOA is a confederation of state osteopathic organizations. Other groups and institutions within the osteopathic profession (including the colleges of specialists, hospital organizations, and associations of osteopathic colleges) are recognized by the AOA as fully autonomous affiliates.

National policies for the whole osteopathic profession are established by the House of Delegates within the AOA. This body includes representatives from each of the state divisions who are elected by the membership of those state divisions. The number of delegates is proportionate to the number of AOA members in each state but averages about 150 each year. The House of Delegates elects all AOA officers and members of the AOA's Board of Trustees.

One of the chief functions of the AOA is accreditation. This includes accrediting colleges of osteopathic medicine, intern and residency training programs and placements, and osteopathic hospitals. The AOA is now the only body granted the right to accredit all phases of osteopathic education and practice.

The Association also has a process for policing the practice of the profession. The Ethics and Insurance Review Committees take complaints regarding misconduct or unethical practices by osteopathic physicians and have the authority to take appropriate action--including fines, warnings and, ultimately, expulsion from membership in the association.

Another function of the AOA is communication within the profession. Three publications are published by the association: The Journal of the American Osteopathic Association is the official monthly scientific publication; The D.O. is devoted monthly to news on the college campuses, hospitals, and other affiliated organizations; and Health is a monthly publication aimed at patients and contains articles on health care and preventive medicine. Other AOA functions include student recruitment, student loan and scholarship programs, dues collection, and other membership activities including legal information.

The AOA Auxiliary is comprised of wives, daughters, mothers, sisters, and widows of osteopathic physicians. It has recently been given the task by the AOA of recruiting students for the profession (see section on Recruitment and Admissions, below).

Another significant function of the AOA is providing liaison and cooperation with all branches of state and federal governments and other health agencies, both public and private. The AOA is recognized by these groups as the profession's official organization having the right and responsibility to represent the profession.

A DO must be a member of the AOA to belong to one of its affiliates. The affiliates most involved in the training process include:

- Academy of Osteopathic Directors of Medical Education
- American Association of Colleges of Osteopathic Medicine: nine member colleges, founded in 1868
- Student Osteopathic Medical Association
- American Academy of Osteopathy; 950 members, founded in 1937 to conduct graduate level seminars and courses, now involved in continuing medical education
- Bureau of Professional Education of the AOA: approves policy regarding new or different intern and resident training programs--the accrediting agency for college and postdoctoral programs
- National Board of Examiners for Osteopathic Physicians and Surgeons: 15 members, founded in 1935, made up of physicians appointed and approved by the trustees of the AOA

THE SCHOOLS

There are currently nine schools of osteopathic medicine and six possible new ones under discussion or now being developed. The schools are located primarily in urban areas and mainly in the Midwest (Illinois, Texas, Iowa, Michigan, Missouri, Oklahoma, West Virginia, and Pennsylvania), but proposed new sites would widen the area of accessibility by adding schools on the East and West Coasts.

FINANCING OSTEOPATHIC TRAINING

Osteopathy is among the three most expensive of the MODVOPPP professions, being on a par with dentistry and podiatry. In an HEW study of How MODVOPPP Students Finance Their Education, it is clear that students of osteopathy have the hardest time. Thirty-five percent (as opposed to 18% in medicine) receive federal scholarship program help. However they get the lowest average scholarship amount--an average of $469/year as opposed to the $969/year average scholarship granted to medical students. Seventy percent of all osteopathic students take out loans, and 79% of them report past debts for earlier schooling (see Table 3, page 18). The amount of indebtedness increases significantly from freshman to senior years in osteopathy, and the amount in every year is higher than in the other MODVOPPP professions. This is partly because osteopathic medical training is the most expensive of the MODVOPPP professions. Table 4 (page 19) shows average tuition, living, and other expenses for the MODVOPPP professions in 1970-71.

By 1975-76, tuition averaged $2,100 per year is osteopathic schools. The most expensive school was $3,250/year, the least expensive was $1,598 for residents and $1,948 for non-residents. This very high cost of training is especially onerous for osteopathic students: 12.4% of their families earned less than $5,000 per year and 25.2% earned between $5,000 and $9,999 per year (see Table 5, page 19).

Osteopathic students are eligible for all the federal health profession loan and scholarship programs and for the Armed Services program. In addition, the National Osteopathic Foundation gives some scholarship and loan support. But of all the MODVOPPP professions, osteopathic medical students receive the greatest number of loans, pay the highest tuition for school and, at the end of that schooling, have the highest amount of indebtedness. They receive the lowest amount of money in scholarships and the third lowest amount in loans. Osteopathic medicine is a difficult career choice to make financially (see Table 6, page 20).

TABLE 3

PROPORTION OF STUDENTS WITH DEBTS IN HEALTH PROFESSIONS SCHOOLS AND AVERAGE AMOUNT OF INDEBTEDNESS BY SCHOOL CLASS: JUNE 1971

SCHOOL CLASS	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH
All classes:								
% reporting debts	65	79	74	66	65	70	56	N/A
Average debt	$4,289	$5,966	$4,888	$3,534	$3,559	$4,115	$2,477	
Freshman:								
% reporting debts	61	72	66	58	57	60	52	N/A
Average debt	$2,975	$3,457	$3,162	$2,670	$2,560	$3,119	$1,974	
Sophomore:								
% reporting debts	62	75	73	70	67	70	58	N/A
Average debt	$3,545	$4,930	$4,149	$3,180	$3,032	$3,691	$2,315	
Junior:								
% reporting debts	68	84	78	68	68	76	57	N/A
Average debt	$5,194	$6,069	$5,322	$3,851	$3,898	$4,368	$2,650	
Senior:								
% reporting debts	72	84	81	72	73	80	58	N/A
Average debt	$5,504	$9,796	$6,900	$4,552	$5,047	$5,318	$3,261	
Rank of Sr. debt	*3*	*1*	*2*	*6*	*5*	*4*	*7*	

SOURCE: *How Health Professions Students Finance Their Education, Department of Health, Education and Welfare Publication Number (Health Resources Administration) 74-13, October, 1973.*

NOTE: *Numbers in italics denote rank.*

TABLE 4

AVERAGE ANNUAL EXPENSES OF HEALTH PROFESSIONS STUDENTS
SCHOOL YEAR: 1970-71

SELECTED EXPENSE ITEMS	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH
1) School Expenses (tuition, fees, books, etc.)	1,552	1,770	1,615	1,362	1,458	1,788	1,131	N/A
2) Board & Lodging (maintenance of living quarters)	2,219	2,420	2,306	1,863	2,038	2,575	1,531	N/A
3) All Other (Taxes, insurances)	1,758	2,520	2,310	1,248	1,755	1,938	1,077	N/A
TOTAL	5,529	6,710	6,231	4,473	5,251	6,301	3,739	N/A

SOURCE: How Health Professions Students Finance Their Education, Department of Health, Education and Welfare Publication Number (Health Resources Administration) 74-13, October, 1973.

TABLE 5

AVERAGE ANNUAL EXPENSES OF HEALTH PROFESSIONS STUDENTS
SCHOOL YEAR: 1970-71 (By Percent)

FAMILY INCOME (by Percent)	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH
Less than $5,000	6.8%	12.4	7.3	11.7	9.8	11.3	16.9	N/A
$5,000 - $9,999	20.1%	25.2	22.0	27.9	26.0	24.8	31.6	N/A
$10,000 - $14,999	24.9%	27.9	29.8	29.6	28.8	27.7	28.7	N/A
$15,000 - $19,999	14.8%	13.5	15.7	13.7	13.7	15.3	12.7	N/A
$20,000 - $24,999	11.5%	7.2	11.0	7.7	9.6	10.1	5.3	N/A
$25,000 or more	21.8%	13.9	14.3	9.5	12.2	10.8	4.7	N/A

SOURCE: Minorities and Women in the Health Fields, Bureau of Health Resources Development, Health Resources Administration, Public Health Services, Department of Health, Education and Welfare, 1974.

TABLE 6

PROPORTION OF MODVOPPP HEALTH PROFESSIONS STUDENTS REPORTING LOANS
SCHOOL YEAR: 1970-71
(By Percent)

SOURCES OF LOANS	TOTAL	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH
All Sources	54	54	70	64	52	54	60	43	N/A

SOURCE: How Health Professions Students Finance Their Education, Department of Health, Education and Welfare Publication Number (Health Resources Administration) 74-13, October, 1973.

From our interviews with female students in all of the MODVOPPP professions, it appears that women may have a more difficult time financing their training than men. This is addressed, in part, by schools giving more proportionately of the scholarships and loans to women, but among our respondents, women students more often than men spoke about extra pressures and worries about getting money and incurring debts (see Table 7).

TABLE 7

COMPARISON OF RECIPIENTS OF FEDERAL LOANS AND SCHOLARSHIPS BY SEX AND PROFESSION: 1971-72

(By Percent)

1971-72	TOTAL	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH
Women Percent of Total Enrollment[a]	-	10.8	3.4	1.9	11.5	3.6	1.3	24.9	N/A
% Scholarships for Women	13.7	13.1	4.6	2.1	9.9	4.1	3.4	29.2	N/A
% Loans for Women[b]	11.4	12.6	4.3	2.2	11.3	2.9	1.4	26.2	N/A
Total Scholarship Recipients[b]	Total	M	O	D	V	O	P	P	P
% Women Receiving Scholarships	23.2	23.5	44.7	24.1	20.4	30.6	80.0	22.9	N/A
% Men Receiving Scholarships	22.0	20.0	35.2	24.3	25.0	29.2	27.0	20.2	N/A
Total Loans Recipients[b]	Total	M	O	D	V	O	P	P	P
% Women Receiving Loans	28.2	38.4	57.6	41.8	30.1	30.6	46.7	18.7	N/A
% Men Receiving Loans	32.8	34.4	49.6	39.2	31.7	41.9	38.5	19.2	N/A

SOURCES: [a] *Women in Health Careers: Status of Women in Health Careers in the United States and Other Selected Countries, Chart Book for International Conference on Women in Health, The American Public Health Association, 1975.*

[b] *Recipients of Health Professions Loans and Scholarships, 1971-72, United States Department of Health, Education and Welfare.*

Although some males mentioned problems in financing their education, almost all of the women spoke of it. Both male and female respondents recognized that problems with financial support affect women differently than men, and female students observed that they believed men have an easier time getting loans and getting support from their families.

> *Obviously the women who are coming have chosen to come knowing that they're going to have to support themselves. From my point of view, all it says is that, damn it, if a woman decides she's gonna do something she does it at whatever cost, whereas the guy has it a whole lot easier. (Third year student, female)*

> *She's gonna have to support herself nine times out of ten, whereas a guy doesn't have to. His wife works or his parents will support him. (Second year student, female)*

> *It's just that it's easier for a guy to get somebody else to support him on his climb to a high-paying profession than it is for a woman to get somebody else to support her on an equal climb. (Second year student, female)*

> *I think it's probably a risk for a bank to finance their* [women students'] *education, though. The bank says, 'Oh, you're going to be a doctor and we're going to loan you $8,000 a year for the next three years and then what are you going to do? Practice a year and then get pregnant and raise kids? What kind of a risk are you? Even though you are going to become a doctor...' I can see where they might not be as good a risk as a male physician. (Second year student, male)*

All the female students we interviewed had taken out loans to finance their training. Three had fellowships as well, and one had a Public Health Service scholarship. But the male students showed a different pattern, with less reliance on loans. Two were supported totally by their spouses, two had loans to supplement spousal contributions, two were supported by parents, one was in the public health service, and one was supported solely by loans.

THE PROFESSIONAL TRAINING PROCESS

Recruitment and Admissions

National figures on applicants, students, and graduates are not available over a period of time, although we do have an American Osteopathic Association (AOA)

published account for 1974. There were 3,156 students in the nine colleges, 587 graduates. For the two schools we visited, the numbers are as follows in Table 8.

TABLE 8

APPLICANTS, ENROLLMENTS BY SEX IN THE SCHOOLS VISITED IN STUDY
(By Percent)

Year	Total Number Applicants	Percent Women Applicants	Percent Women Enrolled
1972-73	1,591	4.8	9.5
1973-74	2,360	4.9	14.0
1974-75	2,886	7.8	14.0
1975-76	3,050	12.4	15.4

Source: Urban and Rural Systems Associates' field data.

Women are enrolling in greater percentages than they appear in the applicant pool, but we have no clear explanation for this. According to comments made by admissions officers and some limited available data, it appears that the average pre-admission Grade Point Averages (GPAs) of women enrolled are higher than men's, but the average MCAT (Medical College Aptitude Test--used by osteopathic medicine) scores were lower. However, comments made by admissions' officers, faculty, and administrators we interviewed often indicated that they think the women students are brighter and better qualified than the men.

For example:

> *Women bring a lot...on a person to person basis our women our best students for a couple of reasons for that... one, they are a highly selected group when they apply; there's a selecting out process that occurs. Another factor, the osteopathic profession is a minority profession and I'm convinced that we don't get our fair share of female applicants. We had...out of our total applicants, I think about 9% were female applicants, and of that group we accepted about 17%. Certainly, on that basis, you can get in easier than a male, but by the same*

token, the total women applicants would probably be better than the random selection of the same number of men... academically. (Chief Administrator, male)

Women are good students--they are better able to work under stress because they're geared for it. (Clinical professor, female)

The psychology of the country is such that a woman will not apply to medical school unless she thinks that she has a damned good chance of making it, and because of that, you get a higher standard. You get women who are better qualified overall than the men. So you get a better class. (Second year student, female)

The girls in our class are real bright. They are better students than the men. But you have to wait and see what'll happen when we get out there and have to perform. (Second year student, male)

Osteopathic medicine, more than the other MODVOPPP provessions, seems to really care about the characteristics of the people accepted into the profession. The entire admissions process is an attempt to assure that people coming into the field will be dedicated, loyal to the profession, reflect well on the profession, and make use of their training. For this reason, the informal network of friends and colleagues within the profession is relied on heavily in recruitment and admissions.

The profession makes little attempt to recruit beyond the reach of personal contact between the DO "family" and a prospective recruit. A large majority of the students we spoke with entered the profession as a partial result of contact with a practicing DO. The formal recruiting efforts are consistent with this approach. The Women's Auxiliary of the AOA (DOs' wives and sisters) has recently begun to recruit by talking with male and female junior high and high school students about what life as a DO is like. The AOA's decision to aim recruiting efforts at this age level stems from a concern that the supply of qualified applicants may shrink as the baby boom passes.

There is a new centralized application system, the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS), run by the

AOA, and used for the first time this fall by some of the schools. But generally a prospective applicant writes directly to the schools for an application. Applications are not standardized although certain components are shared by all schools including transcripts, letters of recommendation, and MCAT scores. The MCAT must be taken in full the year preceding application and is administered by the Association of American Medical Colleges. This is the same test taken by students applying to MD programs. The osteopathic profession has no test of its own. In a publication on the osteopathic profession, a staff member of the AOA writes:

> Despite its present widespread use, the MCAT exam is coming under increasing criticism from many medical educators. The primary purpose of the exam is to evaluate the student's potential as a student, to predict as well as possible, how he will meet the academic demands of his professional training. But, like the IQ test, the MCAT has several built-in limitations. What the MCAT does not, and cannot do, is predict the applicant's future performance as a physician. It cannot correlate the student's academic performance and potential with many other variables which will determine how well he handles actual patients, and how well he is able to apply what he has learned in the "real" everyday world of medical practice. (3:39-40)

This concern about the kind of physician a person will actually make is very strong, and some schools require, in addition, the Minnesota Multiphasic Personality Inventory or the Ohio State Psychology Test. We do not know how the schools uses these tests or what they look for, but this interest in facets of a person's ability beyond the measurable academic qualifications is characteristic of the profession.

Schools differ in how they evaluate applicants. None of the schools have strict MCAT cut-off scores for reviewing applicants, and the combined average scores for the incoming classes in 1975-76 at the two schools we visited were: Male--518, Female--515.

The profession-wide average required grade point average (GPA) was 2.5 in 1975-76. although the entering class average in the two schools we visited was 3.1 for males, 3.3 for females. There is no standard profession-wide, and schools range from a strict GPA cut-off to very flexible systems where

GPAs can (and may) be overlooked entirely. Most schools ask for letters of recommendation from both a pre-med advisor and from a DO. The latter is to ensure that the applicant has some contact with the profession and knows what it is about. In some schools, it appears that the letter from a DO is very important, particularly if the DO is an alumnus/alumna or is known by members of the admissions committee.

> Admissions committees in the colleges of osteopathic medicine are particularly interested in factors that have contributed to the applicant's specific desire to become an osteopathic physician. Applicants who have had some personal contact with the osteopathic profession through personal experiences with a DO or in an osteopathic hospital generally have been found to be much more highly motivated and informed in making their career decision. (3:42)

The importance of the informal, professional network may work to the disadvantage of female applicants. To the extent that many DOs tend to be conservative about accepting new roles for women, it is less unlikely that female applicants will find DOs to sponsor them than it is for males.

Three to four years of college (not less than 75% of required credits for a BA) are necessary. A pre-med track is preferred, and a BS recommended, including a full academic year of English, physics, biology, general chemistry, and organic chemistry. There are standard pre-health profession entry requirements. Most applicants have a bachelor's degree, and many of the people we interviewed held master's degrees as well.

A first screening of applicants is generally done based on GPAs, MCAT scores, letters of recommendation, and an applicant's relevant experiences. Generally this cuts the applicant pool down to 15% of the original pool. Some schools interview every remaining applicant. Others interview only those whose applications are in some way marginal or questionable. The nature of the interview, the format, and the weight they carry appear to differ from school to school. Most of them use the interview to determine motivation, ability to express oneself and communicate with others, to gauge health, and to assess how a person looks and behaves. One of the profession's schools, for example,

has an exemplary program where each applicant invited for an interview has two one-hour sessions with trained interviewers. The interviewers go through workshops designed to sensitize them to their own biases, to teach skills of interviewing, and to reach mutual understanding and standardization on what to look for in an applicant and how to score personal, subjective applicant qualities. This is apparently very important since students we interviewed in schools without this standardization reported interviews ranging from hostile, uncomfortable experiences to very friendly and warm exchanges. In the schools without interviewer training, many women students reported feeling harrassed in their interviews by questions regarding a woman's legitimacy in applying and in ability and commitment to the profession. Examples of women's interviews in schools without trained, sensitized interviewers follow:

> *You're asked questions such as, 'Are you in favor of women's lib,' you know. My response to that is, 'I'm for everyone's liberation.' I was asked one very stupid question, 'How do you feel about women burning their bras?' The thing is this, you have to know one thing when you go in for that interview --and I told other girls who applied--don't go in there like an adamant, arrogant female, they don't like it. You can be one, but wait your turn, okay, you gotta get your foot in the door. If you go in like 'I'm going to show you guys' or 'I'm gonna rock the boat,' you're not going to get in the boat. (Fourth year student, female)*

> *The interviewer said, 'Do you realize that if we give you a seat in this medical school, you're taking it away from a man?' Look at all those men taking seats away from me!!! I knew right then that I was going to have to defend my right to be there. (Second year student, female)*

Some schools require secondary applications from people who have passed the first cut. The application includes a series of essay questions about interest in the profession, past relevant experiences, personal philosophy, and commitment to the health fields. These applications are to enable the school to probe more in depth into an applicant's activities, working experience, personal philosophy, and relationship to osteopathic medicine.

Because osteopathy is still a relatively small and cohesive profession, admissions (particularly in the older schools) have many flexible or manipulable points. Being sponsored by a DO, coming from a family of DOs, or having had

contact and work experience with the profession seem the keys which allow other requirements such as deadline dates, competitive GPAs, or MCATs to be waived.

Generally, the profession wants people who are motivated and dedicated to the osteopathic profession (this includes knowing about the profession), can communicate and empathize with patients, believe in the field, will commit their energies and time wholeheartedly to the profession, can withstand the pressure and responsibility of the work, and as a community member will be a credit to the profession. All of these are qualities especially important to a profession striving to enhance its public image. Following are some examples of how our respondents define a good DO.

> *I would say that the thing we want to turn out is a competent, safe, physician, so we need people who know their limitations and are able to refer or to seek consultation as needed. (The chairperson of the Department of Osteopathic Medicine)*
>
> *I think that we all realize that if we are going to be good physicians, that the essential element...the toughest thing about it all will be good patient communication, really good. (Student, male)*
>
> *A good osteopath is well-informed. dedicated, able to devote all one's energies... (Chief Administrator, male)*
>
> *A successful DO is married to his profession. (Clinical professor, male)*
>
> *To be a good DO you have to really want to be a physician, be totally committed. (Chief Administrator, male)*
>
> *We need to find people who really believe in osteopathy and are willing to give it their all. They have to be able to deal with crises think rationally, be accountable. (Clinical faculty, male)*

In one school, recommendations requested from DOs are directed to comment specifically on the following personal qualities from an applicant:

- Motivation for Osteopathic Medicine: genuineness and depth of commitment; knowledge of osteopathic medicine (active pursuit of); ability to function in minority setting (including ego strength); desire to achieve (difficult goals);

- Initiative: self-starter, ability to manage resources;
- Emotional Stability: performance under pressure, mood stability, constancy in the ability to relate to others;
- Personality: ability to get along with others, attitude toward supervision, leadership quality;
- Character: sensitive to others' needs, knows own strengths and weaknesses;
- Industry: perserverance, endurance;
- Expression: clarity, articulates position well;
- Judgement: common sense, decisiveness;
- Personal Appearance: appropriate for occasion; and
- Reliability: dependability, conscientiousness.

A staff member of the AOA, in a recruitment book, states the following similar desirable attributes in an applicant:

- Better-than-average physical health, so that it will be possible and not too difficult for him to endure the intensity of professional training and the sudden, incessant and often rigorous demands on his time and energy in actual practice.
- Financial resources to guarantee completion of training through internship. Although a large number of scholarships, loans, and other types of financial support are available to osteopathic students, lack of sufficient funds too often distracts students from concentrating on their studies.
- An intellectual capacity which will enable him to understand and apply, as well as accumulate, a monumental volume of professional knowledge and skills.
- A high degree of emotional stability and ability to control his own emotions and actions so they can exert a reassuring influence on the thinking and behavior of the patients under his care.
- Inherent honesty, integrity, reliability and dependability, which will instill implicit confidence and command ready compliance in all matters pertaining to the health and welfare of his patients.

- Thoroughness, indicating his ability to solve problems through reason and careful deduction, and to complete each task as it arises as completely as possible.

- Personal altruism, or an unselfish devotion to an interest in the physical and emotional welfare of people, regardless of the demands on his time and energy, and without primary thought of compensation.

- Finally, that intangible something called personality which includes a combination of the above-mentioned attributes, but which also includes initiative tempered by humility, the capacity for considerate, empathetic leadership, a profound recognition of the value of human life, and a sense of humor which can help both the physician and his patients weather periods of stress, disappointment, and tragedy.

  What is sought for then, in summary, are compelling, well-rounded individuals who give high promise of developing into the unique type of personal physician who forms the foundation of the osteopathic profession. (4:43-44)

Because of the profession's increased visibility and the need its members feel to demonstrate the profession's legitimacy, many people feel that integrity, conformity, and honesty are of chief importance. Students seem more conscious of this than anyone. The following example is taken from a male group interview where many similar concerns were voiced:

> *I find myself feeling a special sort of anger at DOs who screw up on the outside and get publicized for it. The first guy caught in Michigan cheating on the lottery tickets was a DO and it just pisses me off. It wouldn't upset me nearly as much if it was an MD, but it's a DO, doggone it! And that's a bad mark for the profession and it gets well publicized... That was a crime...and I get mad when I hear of DOs committing gross negligence and getting malpractice suits. Anywhere a DO is involved, I find myself having kind of a special interest. Because it's a small profession. There are only about 4,000 of us nationally. So it does matter, we need good publicity, not bad, and so I do feel that if somebody else screws up, it is a kind of a blight on my name and I am kind of concerned that way... I think maybe there's another aspect that in a minority profession like this, really until we are out into the field and we have sort of made our own*

way, at least to a certain extent, I think we are a little hesitant to exert ourselves to cross anybody that might not, you know, particularly care for what we are pushing for. I think that there are a lot of powerful people that are in positions of authority who can really make you or break you. You have to play the game...and that means that I really care about what the other students here are like. They better be good and honest and dedicated.

Pre-Clinical Training

The AOA requires the following courses to be taught as a minimum for the DO degree:

- Standard Basic Sciences--First and Second Year: human anatomy, biochemistry, pharmacology, physiology, microbiology, pathology;
- Special Courses: medical ethics and legal medicine; history, basic theory, and practice of osteopathic medicine;
- Clinical Courses: medicine, pediatrics, OB/GYN, preventive medicine, public health, psychiatry, surgery, radiology, physical diagnosis, clinical, and laboratory diagnosis.

These courses have traditionally been divided into two pre-clinical years of basic science and two clinical years, but this is changing in many of the schools. One school now has a three-year curriculum and many innovative curriculum features. The emphasis in all osteopathic colleges is on turning out family practitioners with the knowledge and the personal skills necessary for developing and maintaining relationships with patients, their families, and the community. Basic science instruction is done by academics; the clinical courses are taught by DOs. Even those schools with a basic traditional four-year model have modified the curriculum in recent years to include early clinical experience in the first and second years. In all of the schools the program requires a more than full-time energy and time commitment of the students and maintenance of a minimum GPA to stay in, but program flexibility differs from school to school. Innovative curriculum programs include integrated teaching of the organ systems, spiral curriculum with basic and clinical sciences taught in increasing levels of difficulty throughout the curriculum, and flexible curriculum in terms of sequence and time for completion.

The environment for non-clinical courses is most often large lectures and laboratories. Students are evaluated on the basis of knowledge acquired and retained. These courses are very similar to undergraduate science courses and from reports in our interviews from students and faculty, female students by and large excel in these courses.

Clinical Training

Clinical training is taught by DO practitioners in hospitals, clinics or offices. This is where the student acquires the appropriate professional behaviors and skills in addition to basic technical knowledge. As a consequence, expectations and evaluations of students are based on more subjective criteria than in non-clinical courses. This is the point where women students most sharply feel the clash between expectations of them as professionals and assumptions and expectations of them as women.

Standard clinical rotations send students through the following services:

Medicine	Neurology
Pediatrics	Emergency Room
Surgery	Anesthesiology
OB/GYN	Family Medicine
Ear, Nose and Throat	Psychiatry

Students move through these rotations in small groups and work under a preceptor on the wards with accompanying seminars to discuss their work and experiences. Evaluations are narrative discussions by the preceptor of a number of factors including patient relations, relations with other health professionals, cooperativeness, ability to work under pressure, etc. In some schools this training takes place in the school health center or hospital which is specifically geared toward teaching. In other schools students do their clinical training in placements around the area or state where an individual practitioner may be paid by the school to take on teaching responsibilities. Placement in these rotations is almost always random as students go through all of them anyway. In schools that send students to facilities which are not under the school's jurisdiction, students will occasionally be switched off a service if problems are encountered or anticipated between the

practitioner and the student. Generally, however, students are dependent on maintaining a good relationship with the preceptor on each service for learning the material and for a passing evaluation. This is a potentially difficult situation for women students. Those we interviewed said they often encounter prejudices in the clinical setting regarding women in the profession. For example:

> *Some doctors just can't take it, me being a woman. The doctor's the problem. The patient is not the problem. The doctor said to me, 'Will you leave now; I'm going to do a hernia exam and I think he might be a little embarrassed.' It's perfectly feasible for me to go all the way through school and never do a hernia exam because I can run into one preceptor after another who would have that uptightness, and one attending physician after another and I could get through my internship or beyond never having checked for a hernia. (Fourth year student, female)*

> *Sure they* [women students] *have problems...constant problems ...primarily with our community based physicians... women will come back to us and usually to my office...12 or 14 irate women students pounding on my desk and beating me up because they've gone to a physician's office, or a preceptor's office and he will allow a male student to do a pelvic exam on one of his patients but will not allow the female student to examine the male genitalia on one of his patients. It's very common, and it's not going to be solved right away, it's not going to be solved at all with some of these physicians. I'm not at all sure that it has anything to do with the fact that they're a minority profession. I think it has to do more with the fact that it's been a male profession. (Chief Administrator, male)*

Postgraduate Training: Internships

The DO degree is awarded on graduation from an osteopathic college. In most states, however, an internship is required for licensure. In addition, internships are required as a prerequisite for residency programs. Ninety-eight percent of the students do a one-year internship.

Osteopathy has a centralized internship placement system run by the AOA. Students fill out applications stating their first choice hospital (usually on the basis of locale). Hospitals see the lists of students interested

in their area and send the matching program a list of choices. The AOA matching program then places interns. There are more internships each year than students to fill them so all get placed somewhere. Competition, however, for the more prestigious hospitals or the more advantageous locations is stiff, and it is possible for both the hospital and the student to make pre-arranged deals and manipulate the system to work for them. This is done by contacting the hospital or a physician connected with the hospital, and setting up an interview through a mutual friend. This is often a father or other relatives who are DOs or by a sponsoring faculty member. The student then receives some sense from the hospital as to what the chances for acceptance are, agreements are made and the student puts the hospital down as first choice, and the hospital requests that student through the matching program.

An internship is often a mutual testing time for an intern and a hospital to decide if they want to continue the relationship. Many DOs select their internship in the area in which they want to settle and see it as an opportunity for building relationships with the hospital and other DOs.

An internship runs for twelve months and must be in an AOA approved and accredited osteopathic hospital. During that year, the intern works as a regular practicing DO, rotating through hospital services and spending a lot of time on call. At the successful completion of an internship, the hospital issues an AOA approved certificate to the intern.

Licensure

All states license Doctors of Osteopathy. Forty-one states and the District of Columbia grant unlimited practice rights. Some of these states also issue a limited license which places restrictions on the practitioner's right to use drugs or perform surgery. Nine states have limited license only. All states grant licenses to graduates of accredited schools who fulfill the educational qualifications and pass the required examinations.

The licensing agency varies in make-up by state. Twenty-four states have boards composed solely of osteopathic physicians. Twenty-four states plus

the District of Columbia have composite boards of both osteopaths and MDs. In six states, Puerto Rico, Quebec and British Columbia, osteopaths are licensed by boards made up entirely of MDs.

The Federal Licensing Exam (FLEX), a three day comprehensive exam, is used in 37 states for licensure of DOs. Although there is central preparation of the questions, this examination is given only by the State Boards, and there is considerable variation in passing grades and fees as determined by laws and board decisions in each state. Five states require additional examinations in osteopathic principles and practice. In three states, graduates of both MD and DO programs take the same basic examination for board certification in general medicine and surgery. In addition to passing examinations, the degree of DO from an approved college is a requirement for licensure.

The board or committee issues the initial license in 36 states. In 14 states they recommend issuance. In California, the board does not grant initial licenses but does renew existing ones.

Postgraduate Training: Residencies

To be eligible for a residency position, one must have a DO degree, certification of completion of an approved internship, and state licensure. Residency positions are very limited in number, and only 19% of the students are able to go into specialties. Residencies are necessary for certification in a specialty and usually require two to four years of training after the internship. Each of the osteopathic specialty boards, with the approval of the AOA, establishes its own residency requirements and standards of training. Formal certification requires completion of the training period, passing an oral, written, and practical examination in the specialty, and approval by the AOA Board of Trustees.

Residencies are available for training in the various specialties. The minimum residency training periods for certification by the National Boards in the specialties are as follows:

- Anesthesiology - Two years
- Dermatology - Three years
- General Practice (Preceptor Program) - Three years
- Internal Medicine - Two years training
- Neurology and Psychiatry - Not yet defined
- OB/GYN - Three years
- Opthalmology and Otorhinolaryngology - Three years
- Pathology - Three to four years
- Pediatrics - Two years
- Proctology - One and one-half years (full-time), three years (part-time)
- Radiology - Three years
- Rehabilitation Medicine - Three years
- Surgery - Four years (two to three years for thoracic surgery)

For women, the decision to specialize involves different factors than for men. We heard women speaking of stereotypes they are told about which are used to define the "best" specialties for women, and of their own criteria for making the choice. For example, one woman talked about the resistance in the department of surgery to her decision to specialize, but stated she would do it anyway.

Several women discussed the fact that being female was affecting their choice of specialty, either because of unreceptive people in one or another department, or because the nature of work in some specialties would make it hard to marry and have children. One fourth year woman we interviewed will require a residency to do her specialty work, but is going to pospone this postgraduate work for several years to have children. She hopes it won't be hard to return to the field and get a position after several years away. Another woman student told us she didn't think she could both be a GP and have time for a family, so she will specialize and do hospital and clinic work instead of setting up her own practice.

The following interview excerpt illustrates the kind of things women weigh in their decisions:

I *What is it about anesthesiology that attracts you?*

R *Well, there's a lot of things. When I was working as a med tech, I found myself enthralled by such things as blood gases. I love to do them and this is down the field of anesthesiology. I found myself drawn to this one particular man that I spent some time with this year--an anesthesiologist. He's an excellent one. He would come to the lab and he would treat me as a person. He can actually ask your opinion on some things, which is a fantastic thing for a doctor to do. On a lot of the services I get treated like I don't belong because I'm a woman. So I gained immense respect for the man and I like the challenge, the constant challenge of it. A person's life is in your hands, you have to know all the person's medical complications, you have to know the complications of surgery, you have to combine them, then you have to be prepared then you have to fill all that out and be prepared for anything. And I think that's fantastic. So I like the constant challenge of the feeling of always having to be on top of a situation.*

I *Did you consider any other specialty?*

R *Oh, fleetingly. I more and more just find myself being drawn there. I spent two months in anesthesia and towards the end of the two months, I was doing cases by myself.*

I *Did you dismiss any specialties because you felt it would be harder to combine a family?*

R *Yes, pediatrics and OB, definitely.*

I *Do you think that if it hadn't been for that, you might've thought more seriously about going into those?*

R *Yes, it was just one of my considerations. You know, not everything but just one of the things that I had to consider and juggle. You know, the whole four years have been a juggling game.*

A freshman woman who has not yet chosen a specialty feels that her intention to have a family circumscribes her choice of practice style:

I *Have you chosen a specialty?*

R *I do know that I want to specialize because general practice as a woman is a pretty hard strain, but I haven't limited myself as to what specialty. The only reason I'm thinking of a specialty is that I think that that would be the best thing for me.*

I'll eventually probably get married; I'm not looking for it right now, but it's inevitable, I think probably I'll get married. I think if I do have a family that that would be the only way, to specialize.

I *Because of the time demands of a specialty?*

R *Yes, the time demands. As a GP you have strange hours and with a specialty I think you can limit it much more.*

V. OSTEOPATHIC MEDICAL STUDENTS

WHO THE STUDENTS ARE

As shown in Table 9, first year students in osteopathic colleges are older than students in MD colleges. Seventy-one percent of osteopathic students are 24 years or older in their first year as compared to 22% of MD first year students. Of MD first year candidates, 1.5% were 32 years or older as opposed to 8% of DO candidates. National statistics for the profession are not available by sex.

TABLE 9

SUMMARY OF FIRST YEAR DO AND MD STUDENTS BY AGE: 1973 (Number and Percent)

Age	DO Candidates Entering 1973		MD Candidates Entering 1973	
	Number	Percent	Number	Percent
17-20	1	.1%	997	7.2%
21-23	250	29.0	9,782	71.1
24-27	410	47.4	2,166	15.7
28-31	134	15.5	611	4.4
32-35	50	5.7	-	-
Over 35	20	2.3	-	-
32-37	-	-	177	1.3
38 and over	-	-	18	.13
Unknown	-	-	6	.04
TOTAL	865	100%	13,757	100%

SOURCE: The work on which these data are based was performed under Contract NO-MI-34099, Bureau of Health Resources Development, National Institutes of Health, DHEW, by Dr. Robert Thompson, Director, Department of Educational Services, American Association of Colleges of Osteopathic Medicine, Washington, D.C.

The educational backgrounds of fathers of students in osteopathic medicine are similiar to those of fathers of dentistry students. The highest level of education of half of the fathers is a high school degree or less; but one quarter of all fathers of students in osteopathic medicine had graduate or professional training.

TABLE 10

DISTRIBUTION OF MODVOPPP HEALTH PROFESSIONS STUDENTS BY FATHERS' EDUCATIONAL LEVEL: 1970 (By Percent)

Approximate % Educational Level	U.S.	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH (not avalable)
1) Graduate or Professional	5	35	25	22	17	22	21	11	--
2) College Graduate	7	4	12	15	14	10	7	8	--
3) Some College	10	14	12	16	15	15	17	15	--
4) High School Degree or Less	78	37	50	47	55	52	55	65	--

SOURCE: *How Health Professions Students Finance Their Education, Department of Health, Education and Welfare publication*
Educational level is approximate because numbers were estimated from bar graphs in the source.

Osteopathic medicine is, relative to most other MODVOPPPs, a family profession with 11% of all students in osteopathic medicine having fathers in that field. Only medicine is more so with 15% of the students in medicine having MDs as fathers. By contrast, for example, only 4% of the students of veterinary medicine have fathers who are veterinarians.

TABLE 11

DISTRIBUTION OF MODVOPPP HEALTH PROFESSIONS STUDENTS BY FATHERS' OCCUPATION
UNITED STATES: 1970 (By Percent)

Father's Occupation (by percent)	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH (not available)	*ALL U.S. EMPLOYED MALES*
1) Profession of Student	15%	11%	7%	4%	9%	7%	7%	--	--
2) Other MODVOPPP Profession Health Worker	6	5	7	4	7	9	3	--	--
3) Other Professional & Technical Worker & Owner, Manager, Proprietor	48	42	47	39	42	43	31	--	*28*
4) Clerical & Sales	12	13	13	11	14	15	15	--	*13*
5) Craftsman, Skilled Worker	10	16	16	15	16	16	24	--	*21*
6) Unskilled Worker	5	8	6	6	7	7	11	--	*26*
7) Farmer, Farm Worker	3	4	3	21	4	2	8	--	*5*
8) Other Occupations	1	1	1	--	1	1	1	--	*6*

SOURCE: *How Health Professions Students Finance Their Education, Department of Health, Education and Welfare publication Number (Health Resource Administration) 74-13. October, 1973. p. 6.*

A slightly higher proportion of the students come from small hometowns (37%) as compared with 30% who come from towns with 500,000 or more populations. (See Table 12.)

TABLE 12

DISTRIBUTION OF HEALTH PROFESSIONS STUDENTS BY SIZE OF HOMETOWN: 1970 (By Percent)

SIZE OF HOMETOWN	US	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH (not available)
0 - 24,999	55%	35%	37%	42%	60%	45%	30%	51%	--
25,000 - 499,999	26	42	32	40	30	35	35	32	--
500,000 or more	18	22	30	18	10	20	35	16	--

SOURCE: How Health Professions Students Finance their Education, DHEW Publication No. (HRA) 74-3. October 1973, page 9.

Of the students we interviewed, it appears that there is a difference between males' and females' family experiences, but no information is available nationally. The women students' mothers by and large work outside of the home, whereas most of the men's mothers do not. This fact could affect differing expectations male and female students hold for the proper place and role of women. There are no striking comparisons regarding employment of fathers, but the women students' fathers were generally less educated than the male students' fathers.

Overall data is not available on location of home. Most of the students we interviewed were from the states in which the schools we visited were located with approximately 70% of them from urban areas. Many more of the women than the men had moved to these states in their adult years from East or West Coast

urban areas. Most of the males we interviewed came from areas and undergraduate colleges relatively near the school. Most of the women came from areas farther away (larger metropolitan areas, the two coasts rather than the Midwest) and attended undergraduate colleges in different parts of the country. Since most schools of osteopathic medicine are in the Midwest, the implications for women seem to be that male students hold conservative views of women and the profession--views reflecting the Midwest's generally more conservative posture. An interview with one woman seemed to suggest this relationship specifically, and the assertion that male students are more conservative was mentioned generally by many of the women students.

> *Most DOs in this area* [Midwest] *are conservative. You know, they vote conservative and call women 'girls' and men 'men,' and they tend to--their whole pattern is just very, very arch-conservative to reactionary. Even the men in our class tend to be much more arch-conservative, although we have the full range of political opinion among the women. (Fourth year student, female)*

Osteopathic medicine has more married students than any of the other MODVOPPP professions with 60% of the students married (see Table 13).

TABLE 13

DISTRIBUTION OF MARRIED STUDENTS IN EACH MODVOPPP HEALTH PROFESSION: SCHOOL YEAR 1970-71
(By Percent)

	MEDICINE	OSTEOPATHIC MEDICINE	DENTISTRY	VETERINARY MEDICINE	OPTOMETRY	PODIATRY	PHARMACY	PUBLIC HEALTH
Married Students	47	60	55	49	44	54	31	N/A

SOURCE: How Health Professions Students Finance Their Education, Department of Health, Education and Welfare Publication Number (Health Resources Administration) 74-13. October, 1973. Pages 9 and 11.

No national data on marital status is available by sex, but from our field research it appears that many more male students than female are married. Of our respondents, 50% of the men were married and only 17% of the women.

ATTRACTIONS AND ROUTES TO THE PROFESSION

Male and female students we interviewed differ somewhat in the reasons they were attracted to osteopathic medicine. Generally women said the attractions were primarily the nature of the work (helping people), and the specifically human aspects of osteopathic medicine. Many male students said the choice to be a physician was based on life style possibilities (status, good pay) as well as the nature of the work. The choice of osteopathy for males was often second to a choice of allopathic medicine. The following excerpts from our interviews show some commonalities and some differences in what attracts men and women to the field:

> *I wanted to be able to help people, and I've always liked science so I thought this would be a good thing to do. (Second year student, female)*
>
> *Medicine is such a potentially human field, and osteopathy seemed so much closer to really doing it right. I mean, osteopaths really are much more into patient care than MDs. (Second year student, female)*
>
> *I wanted to be able to save people, to really make a difference to people somewhere. (First year student, male)*
>
> *It's a challenging field and I figured it always would be interesting. Also you get good pay. (Second year student, male)*
>
> *I always wanted to be a doctor. When I didn't get into MD schools, I thought of osteopathy because it's less competitive. (First year student, male)*
>
> *No one knows what a DO is. They think we're like chiropractors. But at least I'll be able to practice medicine. (First year student, male)*
>
> *DOs are more human, I think, than MDs. MDs tend to be real brainy and removed. (Second year student, female)*

Many students, male and female, spoke of their futures in osteopathy as a calling--a way of life that involves a full-time commitment to the profession, a lot of involvement with their patients, and the pressures of life and death

responsibility. The men spoke of looking forward to good salaries, a respected position in their communities and to an interesting way to spend their energies and the women to the challenge and involvement of the nature of the work.

All of the students we interviewed had been through the "pre-med grind" before coming to professional school and were prepared for a continuation of the hard work, competition, and limitations on their extracurricular lives. Those who had been rejected from MD school felt that it would be easier to get into a DO school and that they would need to be "less brilliant" to get through. A majority of the men we interviewed decided first to be an MD and when turned down by allopathic medical schools, chose osteopathy. The influences that directed them toward being physicians were primarily parents and the general image and status of being a doctor. Many of the male students lived in areas where osteopathic physicians and schools are visible. None mentioned how they "discovered" the profession. Two male students described the process this way:

> *I was reserve listed at MD programs but I didn't get in. Someone mentioned osteopathy to me so I just applied, figuring it was worth a try. (Student, male)*

> *Before I went into the army I had taught physics in high school. When I got out I thought of law school but missed science, so I applied to both MD and DO programs. I only got into the DO schools. (Student, male)*

Other males followed similar patterns:

- Rejected at MD school. Worked as epidemiologist. Applied to DO programs.
- Was a radiologist. Didn't get into MD programs, went into the navy, then applied to DO programs.
- Microbiologist. Went into the army and received special forces medical training in Vietnam. Applied to MD and DO programs.

Only one male we interviewed had not applied to an MD program. He lived and worked in a rural midwest area where the only doctors were osteopaths:

> *I was working on my PhD in physiology, then I dropped out to farm for awhile and decided I wanted to go back to the sciences, so I applied to DO schools because all of the doctors where I came from are DOs. (Student, male)*

Two of the men who had applied first to MD programs had close relatives who are DOs and now plan to go into practice with them. Their exposure and recruitment to the profession clearly came from these relatives.

The female students followed a very different pattern. Either they were recruited directly to the profession through an influential person they admired and chanced to meet, or they did careful research into various health professions and chose osteopathic medicine because of some specifically attractive features. A few women did share with the men the route of applying first to MD schools and then choosing a DO school.

> *I was studying zoology in college and one day read an article in the paper about an older woman DO. It really excited me what she was doing and that it was a woman. So I wrote her a letter and she answered and really encouraged me. (Second year student, female)*
>
> *My pre-med advisor thought I wouldn't get into MD schools and he referred me to a practicing DO to find out about osteopathy. He was the most wonderful, warm, human man, and the way he spoke about osteopathy, I knew it was the right profession for me. (Second year student, female)*
>
> *Once when I was sick in college I didn't want to go to the school infirmary so I just picked a doctor and went to see him. He was a DO who really encouraged me to become one, too. My college counselor didn't even know what a DO is, so this doctor helped me find out about the schools. (First year student, female)*
>
> *My parents always wanted us kids to have a profession. None of the others did it, but the family doctor kept telling me about being a DO and he wrote me letters of recommendation and really helped me. (Third year student, female)*
>
> *I was interested in osteopathy so I went to see an osteopathic doctor who's just a fantastic guy. And he was really good about explaining everything about what he did and I think he was probably one of the instrumental people in my being here. He was the only person that--I don't know if you've ever had interviews--they're really down and so negative. Instead of saying, 'Well, this is a great profession and all that,' it's like, 'Well, are you sure you really want to do this? You realize this that and the other and how hard it's going to be and are you prepared for this? Do you realize you're not going to be able to have a family like everybody else?' It gets you into this hole where you think, god, I'm not sure. But this guy told me, 'Well, my wife and I practiced*

together and it was just so great', and it was like his attitude was just what I wanted to hear right then: you can think of medicine as a healing art, a humanitarian type of thing. It was the kind of spirit of it that attracted me, I was so impressed with him. (Third year student, female)

I used to work as a med tech, and I just began to observe the doctors, that they were not geniuses, they could not walk across their swimming pools, they were people also. I enjoyed the med teching, but, an awful lot of it was just so routine that I was getting bored with it. So I decided well, if they can do it, I can do it. It would be so challenging. Everytime a woman physician would walk into the lab I would get green with envy, so I decided, if they can do it, why can't I do it, so I applied and was accepted. (Third year student, female)

Those who had previous contact with the profession to a large extent faced no surprises or reassessments once inside. One group of women who had read about the profession or whose contact was with one very human practitioner did express negative views of what they actually found, as this excerpt from a women's group interview shows:

This is definitely a conservative profession. It shouldn't be either. It was founded by an abolitionist and a feminist, and it has gotten so white male you can't believe it. (Third year student, female)

It really is. I think that has a lot to do with our problems. I sincerely believe that women in the MD profession don't have quite the same problems that we have because I just think--everytime I go out in that clinic sometimes I think that they're just not ready for us. It's like they're saying, 'Oh God, these women are coming.' You know, you really do get that feeling somewhat. (Fourth year student, female)

Students generally did not express a sense of the profession as different from the general social image. At the most, they expressed disappointment or surprise at their peers or at individual practitioners, but their view of the work did not change appreciably once in school.

ISSUES IN TRAINING

The problems most discussed and most serious for the female students were the problems of isolation and loneliness for the single women, the problems of

being out of the traditional female role, and problems of juggling time and logistics for married women. In addition, all women talked about the pressures of having to try harder, do more, and perform better than the men.

The single women talked a lot about feeling pressure to remain feminine, to put care and thought into how they dress and act but being careful not to come across as a tease or "too sexy." They spoke of experiencing a strong double standard and finding that when they do date men in the school, stories and rumors that the men have passed around in the dorms abound by the next day. Most of the women agreed that it is best not to date the men in their class at all, and some of them avoid dating any men in the school. This means a kind of loneliness and isolation.

> *Male students don't date women who do better than they. It threatens them. Men traditionally, somehow or another, when they go out with you, want to impress you. They can't impress you because they are medical students and you are a medical student. They can't throw terminology around you to make you be confused because you can understand their terminology and can throw back even better. So there's nothing much they can impress you with. They don't have better grades than you do. You are not impressed with the fact that they're going to be a doctor and they're stuck. This is something that men. . . it's not their fault and I feel sorry for them. They feel that it's their profession that makes them worthy. They're their accomplishments. And a woman's place is to admire them. So the women in our class are of no use to them. (Fourth year student, female)*

A first year woman in a school with less than 10% women tried to date some men in her class and reported on the effects:

R *Oh, I got so much static from them; half of them wouldn't talk to me because they thought I was hustling this person to be married or something, and the men, the guys in the class right away assumed a lot of things and it was amazing the first party we went to, the rumors that were going around Monday morning. I just couldn't believe it. You'd have thought I had become a loose woman by just going out with the guy!*

I *How do you feel about that?*

R *It bothers me. It doesn't bother me as much because I more or less had to build a wall around me and just say, 'This is the way I am, accept me please. I want to be your friend.' But if they don't, what can I do? But it's little comments like, some people think I'm here to get married. And then if I don't date someone who asks me out, I'm egotistical. (First year student, female)*

A male student's comments confirmed the women's feelings that to some of the men in their classes they are sexless:

> *There are no problems between the girls and guys in our class. The girls are just like one of us. We don't even think of them as women most of the time. (Second year student, male)*

One second year woman talked about how she feels and reacts when her male peers tease her:

R *As a matter of fact, it happened today in class and I didn't say anything but it was really funny after the class was over they knew that they had hurt my feelings.*

I *What happened?*

R *Oh, it was just a joke, I didn't even hear the joke, but I knew something was going on back there, and somebody, I don't know who said it, but I heard my name, and it was something about, we were talking about heat, how heat is given off or whatever, and the guys were making a joke about being in heat or something, and I heard my name back there. And that was just it. I really got upset!!! But they do that all the time to all of us. I'm not the only one. I can handle the jokes, but when my equal ability is questioned compared to a man, and when the jokes are always about my sex, then I get, I really get irate about that, because I know I'm just as good or better than many of the men in my class, and I'm sick of being treated all the time like I'm just a female body!*

A male student gave his side of the story on teasing:

> *Women here feel picked on and think it's because they are women, but it's really just because of who they are...they practically ask to be teased. It's a way of recognizing them. (Second year student, male)*

A fourth year female student told a long series of anecdotes about how she is treated by her male peers. She ended with this:

> *I heard somebody* [a male student] *say, 'You know that little J----? She thinks like a man, but God would she be hell to be married to.' That's the nearest thing I ever got to a compliment. If there's one thing that I've noticed, time and time again, I've never said anything about it, but it's always interested me. In a group of physicians, interns, residents, male externs, female externs, everybody is 'Doctor'; I'm 'J----'. You know that's very interesting. They don't even realize it, but it's interesting how they perceive you. I sometimes get the impression that they think I'm just here for a change of pace, or to add some sparkle to their lives, something new and different. That is really how you feel sometimes. (Fourth year student, female)*

Male students question the qualifications of their female peers in many ways. For example:

> *The schools accept every woman they interview. It's much easier for women to get in than for a man, and most of them won't even practice. (First year student, male)*
>
> *All the schools have a certain amount of slots just for women--reserved for them, like quotas, no matter whether they're qualified or not. (Second year student, male)*
>
> *It gets me pissed off that women take up a place in medical school and half of them probably won't even practice. (First year student, male)*

The women students know, though, that they have not been given special advantage in admissions. The following comment is illustrative:

> *I'm mad because the men think they're being fair by taking the same percentage of women as they're taking of men. That's fair? Well, it's not fair because the women who apply have already been screened over and over again by pre-med advisors, by parents, by society, so we're better! (Third year student, female)*

Married students, male and female, feel the pressure of not having the choice to be totally a medical student. But the married women feel a special pressure, linked both to performing her role as a woman and managing as a medical student. One woman spoke in depth about juggling her own needs and time so she wouldn't "cross" her husband's ego. Her husband is also a medical student, and she finds that to minimize the competition between them she has to find

places away from home to study and often feels a kind of fear after a test that she might have done better than he. In general, it seems that women don't feel as much as men the pressure or difficulty of the work. They feel competent above and beyond just doing well. Mostly they seem conscious and careful of men's egos--their boyfriends or husbands, their colleagues and professors. They feel that they have to become toughened, self-sufficient, insulated, and hardened to survive their training.

The following is an excerpt from an interview with a married female student:

I *Was your husband supportive of you deciding to go to medical school?*

R *He had mixed feelings. He had very mixed feelings. In some ways he was very favorable, but mostly, he didn't like it a bit. The problem was, he never really said anything, he just clammed up and built up a wall around him. He really never said anything, but I could tell he was really upset and in a dilemma and threatened by the prospect that I was going to come to school, too, and yet he didn't feel like he could absolutely say 'no' to me because this was where I wanted to be. Finally, he gave up with a hesitant 'yes' to it and I entered, and now I think he has a little bit of those feelings left.*

I try to make the competition between us very limited, I don't bring up any areas or circumstances in which we would be in direct competition. We are both thinking of the same specialty but I try very actively to avoid direct competition. It's very lovely to be able to discuss cases, of 'I saw' or 'I learned this' and have the other person know exactly what you are talking about and to have communication along these lines, and that's the very lovely part of it. But I always have to be careful. Here again, I know that his ego is very fragile, more fragile than a lot of men's egos and that I just have to try to be very careful.
(Third year student, female)

Social relationships are different for married male students. Married men feel a lot of pressure regarding the little time and energy they have for their wives and the distance that develops as a result of being so immersed in a world and activity that their wives don't share. The following excerpts from a male group interview illustrate the tensions married men feel:

R[1] *The tension probably would be the same in any kind of schooling, whether its medical school or anything else that takes place over a long period of time. Graduate school or anything else. I think that the fact that there is a chronic tension and also the fact that my wife is a student, too, we all have different deadlines to meet and different individual tasks that have to be accomplished, there's a lot of pulling one way or another. In a way it's organization of time, you have to allocate your time not only for schoolwork and things you have to accomplish but for interpersonal relationships and I think just the fact that it goes on so long. You just have to cope with it on a daily basis. (Third year student, male)*

R2 *If you don't get married before you're in school, you're really going to have a hard time with relationships, male/female relationships, because you just don't have time to work on things. I mean, it's either gotta be there and you just gotta have certain things taken for granted. I mean, sex, sure, but also I mean it's having somebody count for you and having a lot of back and forth really kind of deep stuff. Just to have time to work on that and I've noticed myself that it's going there, I mean all of a sudden, tests come up and I just have to say well, you know, it's too bad. We have this nice thing going, could we put it on hold for two weeks? I feel terrible to do that. I never had to do anything like that before in my life. I have never had any pressures. If I were to divorce my wife after I got through school it would be because of tension and hostility that had been built up between our relationship over a four year span and it all of a sudden comes to a head and that's it. How come a lot of us divorce our wives while we're still in school? Because it takes a shorter time for the pressure to build up. It's just what you can take. (First year student, male)*

Both male and female students talk about the problems of having friends of either sex while in medical school:

Yeah, it's a real problem. I was married for two years before I started school and when we got married I had no intention of ever becoming a physician. And then when my ideas changed, I spent a long time talking about it with my wife. We both were pretty well prepared for it but still, it was very difficult. I had to encourage my wife to be very independent in her interests and fortunately she was working and developed friends and went to school part-time, kept herself busy that way. I was just studying every second. It was really tough.

And another thing, we found ourselves drawing apart because my interests were all on medicine and before, we had shared a lot like in English literature and on other things. My

wife's interests weren't on medicine now and so I couldn't come from school and say, 'Hey, I learned a great thing in anatomy lab today.' There wasn't a lot in common. It's been very difficult. We had our ups and downs. It wasn't easy at all.

And developing close relationships too with students, close friends, I developed maybe three or four, really, you know, good, close friendships that I think will last for a long time here at school. But I think, given the same number of people in an undergraduate curriculum, even though it was pre-med and all that, I would have developed a lot more close friends. There just wasn't time for developing those kinds of friendships even though, in a lot of ways, I really wanted to. (Third year student, male)

Single students also find "there's no time for friendships":

I was really interested in making some girlfriends that were into being a doctor, like me. Well, I came here; there were only eight girls in my class and some of them were married and the other ones were just, they, it just didn't seem personality-wise that we hit it off too well, so I'm really kind of disappointed in that respect, because I really wanted to get some really good friendships. I enjoy going out drinking and having a good time or going dancing. I have my guyfriends and you know, you can do that for so long, and they don't mind taking you out, but I like to go out with girls and just do things, but they're not into that around here and I like to dance. I won't go to a bar by myself, I just won't do it and so it makes it really lonely. I'd do a lot of things differently if there were more girls, for sure. More girls with my attitudes. The girls in the other classes, the juniors, there are a couple of juniors that think a lot like me but their schedules are so completely different from mine that we can't get together. They're on a different schedule completely. There's no time for friendships. (First year student, female)

Single men feel a different pressure over social relationships. They express how hard it is just to be friends with their women colleagues, and to relate to women in any way other than sexual. They hesitate to date women in their class because of the closeness of their daily working relationships and because they feel so exposed to the eyes of their classmates. They also express confusion over not knowing how to be friends and colleagues and to date a woman at the same time.

In spite of the distance and discomfort often experienced between male and female peers, some of the men seem to realize the different kinds of hardships women face and feel respect for their female peers.

Doctors delight in putting women on the spot, but the men in our class are sympathetic. (Fourth year student, male)

Clinicians give women a harder time, but it's good for them. It's not that they have to know more, they just have to show more of what they know. But they get graded the same. (Second year student, male)

Other men are hostile to women and talk behind their backs and gossip. Experiences here are harder for women because they are outnumbered, but there is no discrimination. (Third year student, male)

I wouldn't want to be a woman student. (First year student, male)

I think women have a harder time than like me, for me, my personal relationships, my marriage and everything was all so involved in financing my education and all that, and whereas it's kind of acceptable in my mind, anyway, traditionally acceptable for the woman, the wife, to put the husband through graduate school or whatever. I don't hear of any cases where the husband puts the wife through. You know, where the husband works and puts the wife through medical school and that sort of thing. I think it's more challenging and more difficult for them unless, well, we have a few cases where some women are married to other physicians, that's kind of a special case, but...it's almost a rarity to find a woman physician married to a person of lower educational status, whereas you find many male physicians married to women of a lower educational status. I think it makes it very difficult for a woman to develop a relationship or to find someone...if she's not looking for another physician... a man, when he becomes a physician, has a wider range of potential mates. When a woman becomes a physician, she has a much narrower range of potential mates. (Second year student, male)

Just thinking about problems women have and I've seen some of that, like women physicians at the hospital I'm at, have to put up with incidental c--- like, you know, the new student women, everybody calls them, 'nurse' and everybody calls you, 'doctor' but they see this woman walking around in a white coat and think she's a nurse or a lab tech. You know, just the incidental junk like that; I think can really grind them. They're in changing with the nurses...It's kind of fun, it's kind of rewarding in a way to be called, 'Doctor' and to have a certain amount of prestige in that hospital. I think, you know, if everybody assumes just because you're a woman that you're a nurse or the lab tech

or whatever, you know that's... that's a little defeating. I certainly wouldn't appreciate it. (Second year student, male)

I'll tell you, one of the things that is clear to me, that if I faced a lot of animosity, which women do in classes by and large, and at the same time they were calling me 'nurse', and they were not letting me dress, and of all those goodies that you were supposed to get I just got money (but less of it) and people wouldn't come to me because they don't believe in women physicians, it's enough to make you say, 'I've had it.' I mean, there are so many barriers! Pretty heavy. (Fourth year student, male)

IMPACT OF PROFESSIONAL TRAINING ON STUDENTS

Medical training is a tense and high-pressure experience for osteopathic medical students. A male dean told us that the pressure itself is part of the training:

The first year is a pressure year on purpose. All our students are capable of getting through. We expect them to. Everyone is scared, it's natural and correct to be. A basic part of our training is to help them deal with being afraid. Professionalism breeds a hardness that is necessary. A DO can't let things upset him. (Administrator, male)

Students usually understand that the pressure is intentional:

Three professors this year have told us outright that they're doing this to us on purpose... that they know how it's terrible and they're doing it to us on purpose for some reason that they think they should put us through this thing. It's like hell to get into the fraternity of medicine. But they want to make us tough. (Second year student, male)

Both men and women students talk about acquiring the requisite toughness:

To survive medical school you have to become more tough. You have to become more self-sufficient, more independent, a more stronger person within yourself... strong-minded, I sort of call it. You can still be very much a woman and be

very strong-minded, they're not incompatible. You don't have to become masculine and be strong to be a good physician. I consider myself feminine and yet I consider myself tough because I've had to be. It's...I think it merely creates in you a feeling of toughness. You have to be tough to get through these four years. You have to be able to stand on your own two feet, and we've had some profs that really harassed us just so we'd learn to be able to stand up and stand our ground. (Second year student, female)

The harassment and the pressure really change you. I find myself getting hardened. Yes, I do, I'm a lot more reserved, careful, before I open my mouth. But that's good, too. But I wait until I learn about the person. I'm just more conscious about things whereas I was more open before. I don't know whether that's good or bad. I think as a physician you have to learn to listen and be careful before you judge, so maybe it's good. (First year student, female)

I know I've changed...I feel like I'm a lot less carefree, you know, I feel like I'm kind of weighted down. Like I've always got something on my mind. (Second year student, male)

Male students all expressed concern about changes in themselves throughout their training, including the loss of idealism about the profession and the lack of time for things in their lives that are important to them. The following segments of individual interviews illustrate this process in several male students:

I know that personally I feel that the person I am now isn't the one I was three years ago. I'm a completely different person. I don't even know who or what I am anymore. This damn place, you just kind of sit here and try to suffer through and I think it's very difficult to keep in your own mind who you are and still kiss ass enough around here to get through and get your degree because first, I think most of us aren't willing to really just quit and leave and become a ditchdigger because we really do want to get in the health profession and we just have to put up with a lot of stuff to do it. And that takes away our own ideas, and I think for me, it's going to take until after I graduate and I'm on my own again before I can figure out what I really think and who I really am. (Third year student, male)

After two or three years of breaking your ass trying to get into a school and you finally get into one and then you're intent on staying there. It's taken me the first two years to even occur to me to start thinking, I was just concerned with the academics of it all, now I'm beginning to look around and say, what in the hell is going on? The whole world's out there, essentially the things that I used to love to do, hunting, fishing, have all gone by the wayside, and it seems like my wife is too. (Third year student, male)

I like to think that we change while in school. That they really change the person. I mean there's positive changes you can make and your mind can get bigger and stuff, and I think a lot of the stuff we learn is going to help us that much in getting closer to other people, but there's a negative way we change in that exclusion of personal action. We become just such an automaton, just aimed, aimed down one path that all other people do is just get in the way. (Second year student, male)

It seems to me that, well, you go to medical school, and all you do is study medicine, but I think a lot of people that get accepted in any professional school have a lot of different interests. I'm interested in a lot of things. There's magazines I want to read, and there's books I want to read and explore a wide variety of things and I don't have time for it and I feel a real frustration about people. (Second year student, male)

We have hit so many obstacles that after a while we take, you know, and here's a freshman...a freshman is the most eager student in the world, god, they want to save the world. They have such great ideals. They're such idealistic people. But look at the way they are right now. By the end of that first year, they're broken down. (Second year student, male)

Well, I'm single and I've been in school for two years and I must have lost a dozen girlfriends because this program is structured so that you have to just take away years from your life and devote it to medicine. There is really no real strong competition here, but they have a cut off and if you don't meet the cut off on like every test, because one or two of them are going to fail and nobody wants to be down there, so if a person comes up to me and says, 'I want to go out tonight and if we don't go out, I'm going to be very mad.' I say, 'Well, maybe tomorrow I can talk to you, but right now, I don't have time to argue with you. I really have to study... Women don't understand that. Because I made a commitment when I first started here and it's very hard, you don't have relationships, you just erase them and you know, you feel that, I think that medicine to me was number one, and if my mother had gotten sick, I would have sent a card, but I wouldn't have gone home and that's the truth, you know. I mean if something really bad had happened at home, I'd have gone for one or two days, but there was no really long time I would have stayed. Every day is a test or something. Looking back, I look at myself and I say I was crazy to do that, but it's like you lose years of your life and you look back and say 'What did I do?' (Fourth year student, male)

I feel like I'm losing the ability to relate to people and be very warm and close. One of the problems I have with one of my friends is, he says, 'Well, you have time to talk about problems in medicine, but you've got no time to really be more free and a lot more human anymore.' You know, it's just hard. Sometimes a person says, 'I got a headache' and you run through quickly and ask them, 'When did it start? How long has it been going on? What have you been taking for it?' This is your best friend and he tells you he has a headache, but all of a sudden you're not being a human to him then, you know, you've gotten into a situation where he is a patient and that's very hard. (Third year student, male)

I have noticed the problem of sort of losing friends because you're totally involved in medicine all day long and in the weekends or whatever it is, you go out with someone else, you try to get your mind thinking about something else because you've ignored the rest of the world for six days of the week and on the half of the day you decide to get off, you have nothing to say or do because you don't know what's going on in the rest of the world. Like you... have been in medicine. (Second year student, male)

Women students shared these concerns with men, but focused much more on those aspects of the training experience that affected their feelings about themselves as women and as medical students. These include:

- a lack of role models in the profession, in the school
- the often perceived message that women don't belong in osteopathic medicine
- the frequent questioning by faculty and male students of women's commitment to the profession
- problems of financial support
- problems in considering and choosing a specialty

With no visible women DOs after whom to pattern themselves, women experience increasing doubts about their own abilities to be both a successful doctor and a successful woman. The issue of role models was raised many times in interviews with women. It was expressed in terms of the general invisibility of women DOs and the specific unacceptability as a role model of the very few visible female DOs available.

A woman in medicine has a hard time. First of all, we don't have any female role models. For some reason the few females that there are--at least in osteopathic medicine--I couldn't consider a role model for me. They've given up too much. (Student, female)

The two examples women gave of role models speak of the absence of what they would like to see and be able to believe possible:

I don't accept as my model a woman DO who plays the queen bee. A queen bee is somebody who made it in spite of everything; maybe her father was the head of something and got through. She likes being the only woman and likes being different and will not give an inch to other women and thinks, 'Well, I made it without any help at all--except for my old man being on the board of trustees--and, by God, I'm not going to help anybody else; every woman is going to have to go through at least as much as I did.' (Fourth year student, female)

Other women spoke with anger or disappointment about the woman who has made it but who allows men to run all over her and "do her dirt". The qualities they want to see in a role model are: a successful physician, a well-rounded person/woman, a strong person, a helpful and sympathetic person.

A woman student talked about a woman faculty member whom she admires. But she is also keenly aware that being admirable in the way that that faculty woman is, has costs in terms of the way in which men view her:

She's a great lady and she doesn't take anything off anyone around here, as far as if something doesn't look like its going the right way and a girl's being mistreated or something, she takes care of it right now, but she's just one person and a lot of people like her but I'm not sure they always think of her as a woman, if you know what I mean. She's the most boisterous, she's really a fantastic woman. I have the highest respect for her, but you hear a lot of things about her, I've heard a couple of remarks, I'm not sure people have the respect for her that they really should have. I think it's because she's not married. She doesn't take anything off anybody. I'm not really sure, I really can't say. People talk and they'll all go to her if they want her to do something for them, but yet you hear these little remarks. Maybe it's because she's sort of, I don't want to say masculine, but she's kind of 'neuter', that the people sort of react differently to her. (Second year student, female)

The kinds of situations that make women feel unwanted--that women don't belong in osteopathy--range from assumptions on the part of faculty that, as women, certain medical tasks are not suitable for them, to behavior that puts pressure on women to prove themselves as good enough to take their places as men's equals.

> *You know there really are attitudes like that. I was listening to a physician tell about it. A classmate of mine was applying for a DO residency, and he was saying, 'Well, she's married (her husband is a student, too) and I really don't feel so hot about asking a woman to come out in the middle of the night.' Well, hell, if that's part of the job, they should sit us down and ask us if we're willing to do it. Make it clear what my job is and then it's my option to decide whether or not I want to do it. The fact that I am a woman has nothing to do with whether or not I can perform that job. There's no correlation whatsoever. (Fourth year student, female)*

And another example:

> *How about when you go to your preceptor's office and they put you out for the cervical exam and the guy gets to go ahead and do everything. I got thrown out of a physical today because the physician was going to do a hernia exam and thought it might embarrass the patient--obviously the physician was embarrassed. I've done hernia exams on boys and men and, you know, the doctor couldn't take it. It's perfectly feasible for me to go all the way through school and never do a hernia exam because I can run into one preceptor after another and I could get through my internship or beyond never having checked for a hernia, just because they have some outdated morals about women! (Fourth year student, female)*

The entire hospital atmosphere can make women feel unwanted.

> *I want to add something to this lack of support and that part about catching hell from all sides. First of all, you're in this profession where they really don't want you; they don't like you. Then here you have the nurses who think that you're too good, who hate you for it. They say all the things to you that they would like to say to the doctor. You know, they put us out of surgery for no good reason, all this bulls---, you know, 'Your hand isn't scrubbed', 'You have a strand of hair' --all this...you go through all this aggravation day in and day out. You have no support system. There are no other women. You're probably the only woman. You don't get along with a desk clerk because she wished that she had a better*

job. You get a lot of hostility from women, believe it or not--especially the nurses. They'd like to vent it at everyone but feel they can do it more safely to a woman. (Fourth year student, female)

Other personnel assume that a woman in uniform must be a nurse:

In surgery, I've been standing there observing or if I was on anesthesia (and certain physicians have done it several times) a doctor will turn around and hand me the chart, as if I was the nurse. Or he would take off his gown and gloves and hand, push it at me, so I just stood there and looked at him and then he finally realized that I was not the nurse, that I'm not going to take it, and he goes and pushes it off on some other lady. (Fourth year student, female)

How about the time our class went to do H and Ps [Histories and Physicals] out there with two guys and three girls and they said, 'Oh, you brought some nurses with you.' (Student, male)

Other examples of intentional or unintentional acts that result in women feeling unwanted include:

On the first day of school the president in his welcoming address made all the women stand up. While we were standing he applauded us for our courage and fortitude for coming to this school, and the arduous study that got us here. I was embarrassed and it made me feel as if we don't belong here. (Student, female) [editor's emphasis]

Because there are often so very few women in a class, they stand out and are highly visible. Many women report that they feel this visibility serves to their disadvantage by requiring special behavior of them.

If you miss class everybody knows it, because there are only seven of you and everybody knows you. The guys don't mean to be unfair. I don't think they mean it, I really don't. But they watch you constantly for a wrong step. You also have to learn to maintain your identity as a female. Sometimes it gets rough. How much do I forfeit to be accepted by the others? You don't want to become one of the guys, you want to maintain your identity as a woman. (Second year student, female)

Just by the prospect that you may be one female in one of the groups, it's very noticeable if you're not there. I mean you sort of stick up like a sore thumb. Everyone is

very aware of you, because...just by the few number of you, you're sort of like green martians. So just the physical fact that there are so few of us makes us very noticeable. We have to be more careful about attending class. (Second year student, female)

Another example of visibility:

That starts out for me in going out to a local hospital one afternoon with three male classmates and walking around with the attending physician looking at cardiac cases and whatever else, and the physician asking me questions about the cases instead of any of the men, just to be sure that I'm on the ball. It doesn't matter if the men are on the ball cause they've already made it. (Fourth year student, female)

When I speak up in class, I have to be so sure I'm right just because everyone is waiting for me to mess up. They watch all of the women. (Third year student, female)

Other kinds of problems that make it difficult for women to get an internship stem from the attitudes of hospital administrators and physicians.

Beyond a shadow of a doubt when they're selecting people for internships whether you are male or female does make a difference and being female does count a bit against you. What I'm trying to say is given two people who have equal qualifications they've seen them both, they're saying that if one is female and one is male, the male has the 'A'. There's no question about that. Now, there's no logical reason for that that I can possibly give you. It's just some idea they have that...Oh, there's no question...when hospitals are doing their internship allotment, they're very careful that they never have but so many female internships. I don't care if they're the best in the lot. They will, you know, I don't care how qualified you are...if they've got x number of qualified women, that's it. And very often its five percent... one out of twenty...two out of a class of thirty...and you're stuck...There will never ever be a situation where it will be 50-50 percent...male to female or more female than male... I'd be surprised if you got at any hospital over sixteen percent. (Fourth year student, female)

Another fourth year student who was early on branded as one of the "libbers" is now having a problem getting an internship and claims that one hospital would have taken her if she were less radical.

I don't know whether they actually accept any women but they wouldn't accept me because I'm sort of too obviously feminist or something like that. It really didn't have anything to do with my qualifications. (Fourth year student, female)

Women we interviewed said there is a thin line of proper behavior for a female student, and to complain or fight back at any point can brand her a "women's libber" and therefore unacceptable.

A great deal of anger and lively discussion came out in our interviews but it was also clear that the women do not want to "rock the boat" in any way. It is very easy to get labelled a "women's libber," and the consequence is being socially isolated, watched more closely, and judged more quickly by the faculty. When asked for an example of how someone gets labelled, the following story was told:

During the first week of school, some nudie slides were shown in a physiology lecture. Some of the women in the class wrote a polite letter to the professor that they were offended by the slides. The men in the class thought they had gone 'too far' in writing the letter, that they had no sense of humor. This put some women on the defensive and they got upset. They've been labelled ever since. They tend to stick together now because they aren't included in most things. (Second year student, female)

In general the women seemed reluctant to label bothersome behaviors and attitudes as "discrimination," although many of them gave examples of unpleasant incidents or situations that they had witnessed or that had happened to them. Some expressed anger, hurt or humiliation. But in almost all cases, they stated these things weren't intentional. Exception was made in talking about certain faculty members who they felt really did have it in for women.

All of the women we interviewed spoke of the need to prove themselves and to do twice as much as men to be accepted as competent. And sometimes they expressed the difficulty and pain of changing things about themselves that are considered inappropriate to the profession:

A lot of people believe that women can't be doctors because, quote, 'they're too emotional', or 'Women can't be doctors because they're likely to cry'. And if we confront the male physician and say what's the matter with crying when you lose a patient you love and you're commiserating with the family and you sit and the tears are running down your face, they say, 'Oh, you can't do that. Why, I cry too, but I always do it in the privacy of my office.' Why? Why is it necessary to not show an emotion? They can't come up with a reason but it's got to be the super strong male--John Wayne behavior and the whole new thing is quote 'getting in touch with your feelings' so the whole educational process has been dehumanizing and dewomanizing, and then they want you to be a man and then if you're a man then you're masculine. The things that are strengths of women are considered weaknesses in physicians and shouldn't be, and I'm not even permitted in my present clerkship to even interact with people the way I feel comfortable on a gut level interacting with people. I have to go around and just shut up and let this guy do his thing, and my style is different. In my psychiatry thing, because of all my womanly ways and things, I did fantastic--you know, the crying with the patients was not bad--it was a clue as to how I was feeling inside and how they are feeling. But you're not supposed to--this is what I mean by the stereotype of expected behavior, but they are crazy! They have nothing to do with reality or humanity or doctoring or anything else that I am and believe in. (Student, female)

ATTRIBUTES OF MALE/FEMALE STUDENTS

As Students

Women are easy to work with, never have any academic problems. (Dean, male)

Girls have to do twice as much as men to get through school, and they do it and do it well. (Basic Science faculty, female)

There's a difference between the female medical student, osteopathic medical student, and male. There is a difference... at this stage, but I think this will eventually change. I mean the stage that women have reached in their own acceptance of the fact that they are capable of doing things. There's a difference in the students...nothing to do with the intellect as it does to certain aggressive characteristics. The men seem to have more than the women that I've been in contact with in my ten years. They know if I'm going out to see an interesting case the males will say, 'I hear you have this case, can I go see it, can I see it?' I never have any females

do that. When they're on rounds with you, they seem to be reticent. They don't seem to take an aggressive attitude in patient care as a whole. Of course, there are exceptions, but I'm saying as a whole. Now I don't know if this is cultural...I think that the women that we're getting now in their twenties, 21 or 22...were raised in families that still went with the old attitude where the father made the living and where the mother was the cook and the housewife who raised the children. And psychologically, I think at times maybe a subconscious thing, but they feel, now I'm not a psychologist, I'm just telling you...that sometimes I feel that they revert to that role where they don't consider themselves people, in an equal sense. I don't see in females (except for isolated cases), the real love for the profession. Maybe they haven't reached the point where they consider themselves equal and women have always been taught to be dependent on something, basically. I don't think that medicine is what they've been taught to be dependent on. You see, I think what's happened is that women said, 'We're going to be equal. We want all the same opportunities and rights and whatever it is.' And yet, they may have something in them as women and we have in ourselves as men that makes us respond differently to different stimuli. This is a possibility, you know. I can't answer that. You can't be a part-time individual in a particular area and excel in it, to my way of thinking. You have to devote your energies. That's what I meant when I talked before about the aggressiveness that men have. Women who show aggressiveness are feared. I mean like she's supposed to be more like a woman. She's too pushy. A man can get away with it. He's just an aggressive person, but when a woman does it, it makes men insecure to the point that they don't like it. So that sometimes a woman knows that and they sense it and regardless of what women's libbers say, most women are feminine, I don't care how you cut it. They show a certain amount of femininity at this stage of their development. Now again, as I told you, I don't know whether its the species that are different and it's a natural thing to have that. You know, there's one thing that women do that we can't and that's to have children. There may be something in your chemistry that has to do with your psyche that you can't control. The point is your response may be different because of that or it may be that you haven't reached the point where everybody has accepted this role. Sometimes women will be reticent because it's expected of them rather than...I don't know it's because of that...cultural or because of chemistry, but I've noticed that they take a reticent role frequently rather than be overly aggressive and this makes them worse students and doctors. (Dean, male)

Certain standards for appropriate behavior apply specifically to women students.

Oh, teachers do some dumb things sometimes like flashing up a slide of a Playboy bunny or something, but that's just life. When I was in school I figured that was just one of those things. I just endured it and it passed. I didn't ever say anything, I just didn't laugh. A woman is okay if she handles herself with dignity but a lot of girls nowadays don't. It's disgusting, but it occurs every place, it's just one thing you have to get used to. If you act with dignity, men will treat you as a woman they respect, they will open doors for you, invite you to sit down, that sort of thing. You can act like a woman they'll respect and that works much better than when you try to just act like their female counterpart--joining in on their dirty jokes like one of the boys, things like that. (Clinical professor, female)

Girls are good students but they seem so serious and uptight in classes that it makes everyone else a little nervous. But the worst ones are the ones who jump at every chance to call you an MCP. (Basic Science faculty, male)

As Potential Practitioners

I feel personally inhibited and restrained regarding language and being able to speak on sexual topics when women are around. Men need places to blow off steam and pressure where women won't be, too. I gave a lecture last year on "What I Don't Like About Women Physicians", just to stimulate discussion. Of all the women I graduated with, none are in practice today. So in terms of just the economics of training someone, you have to be careful about women; they just don't pay off. (Clinical professor, male)

The assumption is that because you are a woman, you cannot or will not do certain things. Or--you know, because you are a woman, you should not go into orthopedics. Well, that's absurd! It's just a matter of do you want to be bothered lifting and pulling. You know any woman can do that who wants to put forth the effort. And all these professors and doctors just assume that we can't do things as well as men and they come up with some physical excuse for turning us down. Like one doctor said to me, 'Because you are a woman (when I was going to OB) you don't have to work nights.' I told them, 'Look, I'm willing to work all night. I can come in and work nights. If that's my responsibility, I will be there. You know. This is my job. I can do it. That's no excuse.' (Fourth year student, female)

Women drop out and practice less than men, but in admissions we have to make the false assumption that they will practice. We have no official policy regarding married women, if they want to take a chance, it's fine with us. (Chair, Admissions Committee, male)

I like to see more women in the profession, but on the other hand, I think that in a way, they may be going overboard on this. A large percentage of our class are women and I think I know why this is. There is a tremendous pressure, governmental pressure, HEW, and social pressure that more women be admitted to these programs, but I think that this has been done now and I think that maybe they ought to hold back a little bit to get some experience and see what these women are going to do. Are they going to continue to practice? Or are they going to decide, 'Well, I'm going to get married and I'm going to have a family. I'll take off for five years and then I'll go back to practice.' Well, this is possible, but then they're five years behind, with no real contact to medicine. (Clinical DO faculty, female)

VI. SUMMARY

Osteopathic medicine's struggle for public recognition seems to have resulted in more hesitation than in the other MODVOPPP professions in actively seeking non-traditional members for the profession such as women (and minorities). Thus women are carefully screened in the admissions processes in the schools for a high level of commitment, dedication, and likelihood of future success. Women students accept the full-time commitment expected of them during both training and practice, but they are also aware of and express feeling extraordinary pressure to prove themselves worthy of and able to handle professional commitments and responsibilities. In response to this pressure women are frequently unwilling to request the facilities, programs, and/or service they may need for a proper and supportive educational experience--for example lab coats, gowns, and gloves in their sizes, a women doctors' dressing room, and perhaps personal supports such as counselling to help them cope with the isolation and loneliness which results from being a very small minority in many institutions. The schools also seem unwilling to make changes in procedures, expectations, and programs which would recognize and accommodate the needs of their women students. However some of the younger administrators and faculty members in the schools we visited are committed to actively trying to make women more welcome in the profession and to assuring that their educational experience is equivalent to men's.

I *Aside from being better students, do you see women as having anything particular to offer that is different from the male students?*

R *Oh, I can give you the usual factors that people say: sympathy, this, this, this, and this. I'm not at all sure that's true. So they have something to offer different because they are female. Now what it is, I don't know. I think time will tell. I don't think we have enough experience to know that. Can they hold their own with the men? Yeah, sure, they can hold their own with the men. There isn't any question to that. Whether they should be restricted to fields such as pediatrics, OB/GYN...that's nonsense. They can do any job in medicine.*

Sure women have problems, but you see, what the profession has forgotten, as you go back in history, the founder of the profession was not only an abolitionist, but was a proponent of women's suffrage and don't forget this was back in the 1870s and when he founded the first school in 1895, those blacks and women were to be considered for admissions on the same basis as anyone else. Now obviously that was lost for many, many years, but do women have problems? Sure they have problems, we have constant problems...There were a tremendous amount of female DOs in this profession way back in the 1800s but most of them were religious zealots, converts of the profession...religious to a great extent. Now, we have problems still at the hospital level, although much, much less, where there's no place for women physicians to undress, change her clothes...one must put her in the nurses' rooms. Those were much more acute three years ago; they're much less now. We begin to see hospitals where one would think knowing the personnel would be strongholds of male chauvinism, but they now take female interns in a sizable percentage comparatively because of the fact that they're good physicians. And now there's a rapid change. There's always going to be pockets of resistance but there's no question, they're forced into it. These are our students and they have to be treated in the same way as the other students whether they're male or female and we insist upon it. Now, are we always successful? Heavens, no. We're not always successful, but we intend to make this a profession that belongs as much to women as to men! (Chief Administrator, male)

VII. SPECIAL RECOMMENDATIONS

FOR THE ASSOCIATIONS

The AOA, as a powerful and influential association, can do a great deal to set a tone of acceptance of women in the profession. The AOA should:

- Begin to make use of untapped resources and address the problem of invisible role models by formally encouraging (and when appropriate recruiting and appointing) women to accept leadership positions in the association;
- Set clear policy direction regarding the legitimacy and acceptability of women in the profession through recruitment materials and editorials in journals;
- Include in its evaluative criteria for internship approvals a review of sex bias in practitioners' and preceptors' attitudes and a review to ensure equal facilities for women.
- Publicize for the schools the Title IX legislative mandate and regulations requiring the elimination of any sex discriminatory policies and facilities.
- Devote space in journals and time during conventions to the concerns and special issues of women in the profession;
- Compile statistics regarding the practice patterns of male and female DOs.

FOR THE SCHOOLS

At some osteopathic schools important strides have already been made towards creating an atmosphere and a training system free from sex bias. Other schools have far to go.

- Schools should evaluate clinical placement positions for existing sex biases of preceptors and practitioners and for equal facilities for women.
- Schools should assign clinical rotations so that women are never isolated as the only (and highly visible) woman in a group.
- Admissions committee interviewers should be briefed and, if possible, trained in interviewing techniques, sensitivity to their own biases, and given a thorough sense of what the school is looking for and how to evaluate those qualities. A clear mandate of non-sex discriminatory admissions should be made.

- Adequate uniforms in female sizes should be available as should equal lounge and recreational facilities.

- Escort services, lighted parking areas, and/or self-defense courses for women should be available for female students who need to work late in labs or on clinical rotation.

- Information should be made available to students regarding the admissions criteria and qualifications of entering female and male students to dispel the belief that women were only accepted because they are women.

REFERENCES

1. Agneer, Leonard, "Today's Professional in the Health Care Field", The Osteopathic Hospital, February 1975, pp. 13-20.

2. Ehrenreich, Barbara, Witches, Midwives, Nurses. The Feminist Press, 1973.

3. Heffel, Leonard E., "Opportunities in Osteopathic Medicine Today", Vocational Guidance Manuals, Louisville, Kentucky, 1974.

4. Northrup, George W., DO, "What is a DO? What is an MD?" (pamphlet). American Osteopathic Association, Chicago, no date.

5. Wildish, Robert S., "The Presidents Page", The Osteopathic Hospital, February, 1975.

6. Wilson, Paul E., "Presidential Acceptance Address", Journal of the American Osteopathic Association, vol. 74, September 1974.

ABBREVIATIONS USED IN THE TEXT

AOA	American Osteopathic Associations
MD	Medical Doctor
DO	Doctor of Osteopathy, of Osteopathic Medicine
MCAT	Medical College Aptitude Test
AACOMAS	American Association of Colleges of Osteopathic Medicine Application Service
MODVOPPP	Medicine, Osteopathic Medicine, Dentistry, Veterinary Medicine, Optometry, Podiatry, Pharmacy, Public Health
GPA	grade point average
GP	general practitioner
OB/GYN	obstetric, gynecological physician

APPENDIX A

SUMMARY OF INDIVIDUAL AND GROUP INTERVIEWS

A. NUMBER OF SCHOOLS VISITED: Two

B. BREAKDOWN OF INDIVIDUAL INTERVIEWS:

	Male	Female	Total
Administrators			
1. Deans, Presidents	3	-	3
2. Assistant or Associate Deans	4	-	4
3. Other Administrators	4	1	5
TOTAL	11	1	12
Faculty			
1. Pre-Clinical	5	-	5
2. Clinical	4	6	10
TOTAL	9	6	15
Students-Individual			
1. First Year	3	3	6
2. Second Year	1	2	3
3. Third Year	2	4	6
4. Fourth Year	-	1	1
TOTAL	6	10	16

C. GROUP INTERVIEWS-STUDENTS

Male		Female		Male and Female		Est
# of Groups	Est Avg	# of Groups	Est Avg	# of Groups	Est Avg	Total Students
2	7	2	8	1	6	46
GRAND TOTAL						96

D. OTHER CONTACTS

By telephone: American Association of Colleges of Osteopathic Medicine
American Osteopathic Association

Visits: American Osteopathic Association

Letters: The Osteopathic Medical Manpower Project
American Association of Colleges of Osteopathic Medicine
American Osteopathic Association

APPENDIX B

AOA APPROVED AND ACCREDITED COLLEGES OF OSTEOPATHIC MEDICINE

Chicago College of Osteopathic Medicine

College of Osteopathic Medicine and Surgery (Des Moines)

Colleges of Osteopathic Medicine--Michigan State University

Kansas City College of Osteopathic Medicine (Missouri)

Kirksville College of Osteopathic Medicine (Missouri)

Philadelphia College of Osteopathic Medicine

Texas College of Osteopathic Medicine

Greenbrier College of Osteopathic Medicine (West Virginia)

Oklahoma College of Osteopathic Medicine (Tulsa)

APPENDIX C

DISTRIBUTION OF OSTEOPATHIC PHYSICIANS LISTED IN THE AOA DIRECTORY

	Location	Number of Members*	Number of Non-members	Total
	Alabama	6	4	10
	Alaska	4	1	5
	Arizona	362	45	407
	Arkansas	11	8	19
	California	107	134	241
	Colorado	197	63	260
	Connecticut	20	25	45
	Delaware	30	10	40
	District of Columbia	7	2	9
**	Florida	681	152	833
	Georgia	76	31	107
	Hawaii	18	4	22
	Idaho	12	13	25
	Illinois	240	96	336
	Indiana	160	26	186
	Iowa	302	103	405
	Kansas	143	63	206
	Kentucky	25	16	41
	Louisiana	14	3	17
	Maine	152	55	207
	Maryland	19	11	30
	Massachusetts	94	96	190
**	Michigan	2,233	153	2,386
	Minnesota	46	19	65
	Mississippi	1	1	2
**	Missouri	858	273	1,131
	Montana	6	22	28
	Nebraska	19	14	33
	Nevada	17	11	28
	New Hampshire	7	12	19
**	New Jersey	646	223	869
	New Mexico	104	34	138
	New York	428	192	620
	North Carolina	16	14	30
	North Dakota	3	5	8
**	Ohio	1,020	179	1,199
	Oklahoma	390	59	449
	Oregon	157	19	176
**	Pennsylvania	1,337	409	1,746
	Rhode Island	66	17	83
	South Carolina	6	4	10
	South Dakota	20	8	28
**	Tennessee	35	19	54
	Texas	715	149	864
	Utah	12	4	16
	Vermont	17	24	41

Distribution of Osteopathic Physicians Listed in the AOA Directory (cont.)

Location	Number of Members*	Number of Non-members	Total
Virginia	32	14	46
Washington	108	95	203
West Virginia	61	22	83
Wisconsin	151	28	179
Wyoming	3	7	10
Canada	14	64	78
Foreign	37	37	74
In Military Service	208	6	214
TOTAL	11,453	3,098	14,551

*This figure does not include 44 doctors who have applied for membership and are included in the non-member count.

** Note the uneven distribution of DOs around the country with 62% located in seven states (starred above).

APPENDIX D

CHRONOLOGY OF THE DEVELOPMENT OF OSTEOPATHIC MEDICINE

1874 Dr. Andrew Taylor Still (MD) first described the philosophy and science of osteopathic medicine. Dissatisfied with the common medical practices of massive dosing of drugs and narcotics and the widespread use of surgery and amputation, Dr. Still returned to a study of basic biological principles and developed the theory that the body must be seen as one unit (one part can't be sick without affecting other parts). He believed that the body had within it the capacity to heal itself if left alone. After developing these principles, he approached the medical profession with his ideas and was faced with extreme hostility.

1892 Dr. Still founded his own school to expound his theories--the American School of Osteopathy in Missouri--with 18 initial students of which five were women.

1896 Vermont becomes first state to license DOs.

1897 Founding of the American Association for the Advancement of Osteopathy (forerunner of the American Osteopathic Association) in Kirksville, Missouri.

1898 Popular Osteopath appears as the association's first official organ (first issue published in January 1899; last in June 1900).

1900 American College of Osteopathic Medicine and Surgery was founded in Chicago.

1901 American Association for the Advancement of Osteopathy becomes American Osteopathic Association.

First issue of the Journal of the American Osteopathic Association appears.

1904 Adoption of first code of ethics. Publication of the first directory of osteopathic physicians.

1905 Three-year medical curriculum becomes requirement for AOA approval.

1914 First issue of Osteopathic Medicine, a magazine published for the lay public about osteopathy (later changed to Health).

1915 Four-year medical course is established as a requirement for AOA approved osteopathic colleges.

1916 Founding of Kansas City College of Osteopathy and Surgery, now Kansas City College of Osteopathic Medicine.

1927 First issue of Forum of Osteopathy, association's news magazine (changed to DO in 1960).

Chronology of the Development of Osteopathic Medicine (cont.)

1931 Establishment of a student loan fund by the profession to address the problem of dwindling numbers of students during the depression.

1934 National Board of Examiners for Osteopathic Physicians and Surgeons was founded to develop and administer exams to license practicing doctors.

1936 First inspection and approval of osteopathic hospitals for the training of interns.

1939 One year of pre-professional education established as a requirement for admission to osteopathic colleges.

Advisory Board for osteopathic specialists established.

First specialty board established in radiology.

1940 Two years of pre-professional education set as requirement for admission to osteopathic college.

1947 Approval of first osteopathic hospitals for residency training.

1948 Federal Hill-Burton program was enacted giving federal funds for the construction and expansion of hospital facilities specifically including osteopathic hospitals. This was the first federal recognition of the profession.

1957 AOA recognized as the accrediting body for osteopathic education by the Office of Education of the Department of Health, Education, and Welfare.

1958 Three years of pre-professional education adopted as requirement for osteopathic college admission.

1965 Federal Medicare and Medicaid pregrams specifically recognized DOs and MDs as equally legitimate physicians, and recognized the AOA as the national accrediting agency for osteopathic institutions.

1966 DOs included in doctor draft for the first time.

1967 AOA recognized as official accrediting body for osteopathic education by the National Commission on Accreditation.

1970 Establishment of Michigan State University College of Osteopathic Medicine at East Lansing, first new school of osteopathic medicine in 50 years. Also, the first state supported school of osteopathy.

1972 AOA makes as requirement for membership 50 hours per year of continuing medical education.

1973 Mississippi is last state in the Union to grant DOs full practice rights.

APPENDIX E

SUMMARY OF STUDENT GROUP INTERVIEW ISSUES REGARDING PROFESSIONAL TRAINING

INTRODUCTION

URSA used two primary techniques for interviewing students about their professional training experiences in general and about the problems they encounter in gaining access to and pursuing professional training in particular. Each produced a different set of issues and different emphases.

URSA adapted a planning technique known as the Delbecq Nominal Group Process into a form of group interview which we used to surface from groups of students a broad spectrum of problems and issues they encounter in professional training. The groups were small--typically numbering less than twelve--and they included all female groups, mixed male/female groups, and all male groups. The group interviews gave us insights into which of the problems most group members shared, which seemed to present the greatest obstacles in professional training, and which are controversial.

URSA also conducted a series of individual one-on-one interviews with male and female students. The individual interviews often touched on problems and issues not raised in the group interviews because they might be considered "too personal", because they needed direct probes and encouragement to surface, because they were not shared by other members in the group, or because they were not directly related to the question the group was asked to address.

The list of problems included in this Appendix and the analysis which precedes it represent only those issues raised in group interviews by students in response to a single question posited them by the URSA field team. The list does not include any additional issues--and there were many--which surfaced in individual interviews.

As the study progressed, URSA used several questions in the group interviews, changing them to allow us to probe or follow new areas of concern. As most were non-productive (see VOLUME I on Methodology), this Appendix includes only responses to the question: "Given your experiences and observations, what problems does a woman encounter in becoming an X (doctor, dentist, etc.)?" for women, "Given your experiences and observations, what problems does a person encounter becoming an X?" for mixed groups, and "...what problems does a man encounter in becoming an X?" for the men.

Group members were given approximately ten minutes to write their responses to the question on a card, and the answers were recorded without discussion on easel pads so that all members of the group could see the responses. The list of problem categories included and discussed below was generated from the responses on these cards and on the easel pads. In most cases different issues were raised by men and women, but in all cases where the problem category was shared, it was discussed in different contexts, with different emphases, and in terms of a differential impact on men and women.

Generally the problems mentioned clustered into six categories: structural features of the school(s), profession(s), or sex roles; absence or inadequacy of programs, services, facilities, or equipment provided by the training institutions; problems with characteristics of the profession and its work; access to resources required to consider the profession, be admitted to school, and to participate fully in professional practice; negative attitudes and behaviors of peers, faculty, practitioners, and clients; and the impact on oneself of all of the above.

STRUCTURAL FEATURES OF THE SCHOOL(S), PROFESSION(S), OR SEX ROLES

This category includes all those structural features of the profession or school that affect women's experiences in training as well as structural consequences of societal sex roles which reflect the society's assumptions about appropriate roles for men and for women. By appropriate roles we mean those behaviors, feelings, attitudes, skills, attributes, characteristics, and motivations we usually associate with one sex to a greater extent and/or more often than with the other. Structurally, for women, this refers to the specific sets of responsibilities delegated to them by the society on the basis of their gender. Issues raised by women students in this category include:

Lack of Role Models

Basically this is an issue of how many and where women faculty appear in the schools. At some schools the problem is that there are no women faculty or clinicians at all to whom female students can look for evidence that a woman "can do it." In other schools, women appear only in what students consider the lesser status positions (e.g., Basic Science Instructors) which women students feel is a statement about a woman's proper role within the profession. At the few schools in which women clinicians appear in high level positions, some female students may reject them as unacceptable role models because the women have not managed to balance professional success in filling other feminine roles.

Lack of a Support Group of Women

Women students hope and sometimes expect that support from other women will help offset the social and professional isolation they feel in the male environment of the professional schools. The lack of such support is a severe disappointment and often aggravates the pressures of loneliness and isolation. This is a direct result of few numbers of women in a class or school and is compounded by differences in age and marital status.

Being Tracked into a Limited Range of Specialties or Practice Opportunities

This problem has two aspects. Certain specialties and practice options in each of the professions are labeled as more or less appropriate for women. To some degree these labels are consistent with commonly held stereotypes regarding women in this society. For example, the specialties involving work with children are all considered appropriate for women. Similarly, regarding practice options, those that involve supervising a staff and running a business are generally regarded inappropriate for women. For most women in making the decision regarding specialty selection or practice choice, the stereotypes and pressures to go into one rather than another

selection are important. More important, though, are those problems arising from the necessities in a woman's life of carrying responsibility for both a family and a profession. This consideration, and at times necessity, works to track women into those specialties or practice options that are most easily controlled in terms of numbers of hours worked.

Balancing Work/Family

The years of professional training coincide in our society with a woman's childbearing years. To the extent that women are primarily responsible for the home and children, the problems of time management, energy commitment and sheer logistics in being a full-time student and committed practitioner and wife/mother at the same time create a tremendous pressure and problem for women that men do not experience. This is the single most widespread, cross-professional issue of which women spoke. If the women were not already in the position of managing both wife/mother and professional (student) roles, they anticipated that they would in the future.

Women at a Disadvantage Due to Background or Physical Ability

In some professions women feel that they have a distinct disability or handicap due to their background and socialization as women or due to physical size. In dentistry, for example, a familiarity with tool use and terminology is important and often assumed by the schools. Many women spoke of the problems they encountered in picking up such skills and information that the schools assumed they had but didn't (and that many male students did, in fact, have). In other professions where physical size and strength are important, women spoke of the difficulties and inequities in trying to learn techniques that were developed for the male physique.

Social Problems: Fear of the Impossibility of Finding a Mate

Women in all the MODVOPPP professions speak of some problems with dating men who do not understand, support, or accept their choice of a male profession. In medicine women speak of the fear of never finding a male who could accept their high status, high pay, and strong professional commitment. This problem is uniquely women's because it is an accepted pattern in our society for men to marry women who have less social status and less earning power than they. For women in professions with top status and pay, the range of men for whom they make appropriate matches tends to be limited to the men within the profession who might be more successful than they.

ABSENCE OR INADEQUACY OF PROGRAMS, SERVICES, FACILITIES, EQUIPMENT AND OTHER SUPPORTS OR RESOURCES

When schools fail to provide, or provide inadequate, resources in the learning environment and training program, difficulties are caused for women. This becomes an issue when their special or equal needs are not met by the physical plant. For example, when uniforms, lab coats, surgical gowns, etc., are not available in women's sizes women have to wear things too big for them or dress in the uniforms of other health professionals (such as clerks in pharmacies, nurses in surgery). Changing rooms, lounges, women's toilets, and on-call sleeping facilities are often not as available and accessible to women as to men. Health care services or insurance often do not

cover gynecological and family planning services. Child care is not available. Escort services are not available for women working late in labs, clinics, or libraries.

CHARACTERISTICS OF THE PROFESSION AND ITS WORK

Issues in this category were only mentioned by male students. The category includes features of the work or of the profession which create a pressure on the student and on the practitioner. For example, the life or death responsibility of a physician is felt heavily by medical (both MD and DO) students who feel a special necessity for learning everything possible while in training, for developing emotional means of dealing with that responsibility, and for demanding a more than full-time dedication and commitment from themselves and their peers. An issue more widespread among the MODVOPPP professions has to do with the relative status of a profession vis-à-vis the medical profession. Particularly in the lesser known professions that are struggling with the medical profession for recognition and control over practice rights, the lower status is seen by male students to be a large obstacle to public acceptance.

ABSENCE OF OR DIFFICULTY IN GAINING ACCESS TO RESOURCES REQUIRED TO CONSIDER PROFESSION, BE ADMITTED TO SCHOOLS, OR ESTABLISH FULL PROFESSIONAL PRACTICE

Lack of Encouragement and/or Information

Given the rigors of training and the added pressures for women in a male profession, institutional and informal supports are vital. Women feel a lack of encouragement and support and at times experience direct discouragement. Particularly in the decision to pursue a profession the amount and extent of information and encouragement given women is vital. Although men spoke of a lack of information as an issue for them in the lesser known MODVOPPP professions, it is even more difficult for women. A related issue is access to information passed along informal networks that do not include women--e.g., fraternities, golfing partners, etc., giving helpful hints or suggestions for "how to get what you want" peculiar to the profession.

Access to the Profession's Informal Network of Practitioners

Women experience problems in this area both in training and when trying to obtain access to internships, residencies, or jobs. While in training, women report they are left out of the informal male network in which information is exchanged, support given, and friendships formed. These settings include fraternities, men's changing rooms, golf, and other athletic teams. Women worry that this will result in being left outside the referral and job network when they become practitioners. All students, male and female, worry about getting jobs, internships, and residencies. Women devote much of their energy in this regard to figuring out how to deal with the well-documented and well-known prejudices against women held by practitioners. This increases the pressure on women to "prove" themselves, reinforces the feeling that they aren't welcome in the profession, and most importantly, represents a real obstacle to women in getting through training and into professional practice. Jobs passed from fraternity brother to fraternity

brother, practitioners relying on informal recommendations from their friends regarding which applicants to accept to their practice, and prejudices about the abilities and competencies of women all result in important limits on women's access to these positions.

Absence of Appropriate Personal Characteristics and Attributes Required of Students, Practitioners

This problem was expressed in resentments and statements made by male students in their group interviews and by women in terms of the main stereotypes which the women feel are used to challenge their presence in the schools and in the professions. Frequently mentioned stereotypes include: "women are too emotional", "women are only accepted because they are women", "women are less dedicated", "women are only here to prove something", "women are not good at analytical thinking", "women are too indecisive to be good managers".

Absence of, Concern about Ability to Meet Formal Requirements of Students, Practitioners

This category of issues was mentioned only by men in most professions. It was expressed as concern about passing courses, passing the National Licensing Boards, etc.

Access to Financing

The financial burden of training is felt by both male and female students, but it is expressed to a different degree and in different contexts. For women it is harder to earn money before and while in training. The jobs available to women often pay less money, and in some professions where jobs are available to the untrained (e.g., veterinary clinic assistant), women are not given the jobs. While in training women report they believe it is more difficult for women to get adequate loans. Parents are often less willing to support a woman than a man through expensive and long training. Spouses are less often available as a source of support for women.

NEGATIVE ATTITUDES AND BEHAVIORS OF OTHERS

This category includes the constellation of attitudes, reactions, and behaviors which women face daily in the training environment.

Incidents of Sexism in the School

We heard many and various reports of jokes at the expense of women--e.g., denigrating comments, nudie slides in lectures, actions or comments aimed at embarassing or "putting down" women, intentional or unintentional use of language in such a way as to ignore or put down women. The majority of these incidents were performed by male peers or male faculty.

Resentments by Male Peers

This resentment is primarily expressed by male students in regard to competitive situations in the profession. For example, it includes resentments that women in school are taking a man's place, that women getting jobs means less for men. It also includes beliefs that women get special treatment by admissions committees, faculty members, and clinicians. Another source of resentment from male peers regards the amount of sexuality that is regarded

as appropriate in women. At some schools males express disapproval of the women for stepping outside the boundaries of a traditional woman's role, thus in some way challenging their own assumptions about and ways of dealing with women.

Client Prejudices

This category includes both real and anticipated problems with patient disbelief, distrust, and sometimes refusal to be treated by a female practitioner. The result of these prejudices is that while in training women may be denied important learning opportunities, while in practice it may be more difficult for them to get patients, and in all cases they must anticipate the necessity of proving their competence.

The Prejudices of Staff and Employees in Clinic Settings

In the professions that include a business or managerial component, prejudices and unwillingness of employees and staff to be supervised by a woman is particularly difficult. In all the professions, respect and acceptance as a professional by other health workers is essential. Women report that respect and acceptance are denied them because of their gender.

THE IMPACT ON ONESELF OF STRUCTURAL FEATURES, THE ATTITUDES, AND BEHAVIORS OF OTHERS, OF THE TRAINING PROCESS ITSELF

All of the above listed problems mentioned by women have some impact on their own feelings about themselves and their profession, on the choices they make, and on their behaviors.

Women's Double Binds

This category was variously described by women as "walking a very thin line", "damned if you do, damned if you don't", and "you can't win as a woman and as a professional." Standards of professional behavior conflict with standards of feminine behavior and women are caught in the middle, particularly in situations requiring aggressiveness, decisiveness, or managing others.

Women's Feeling That They Must Work Harder to Prove Themselves

The combined pressures and impact on women of stereotypes that challenge women's abilities, competencies and commitments result in women reporting the following kinds of problems: women fear making mistakes or taking risks; they fear speaking up or asking questions that might be considered stupid; they feel they have to work twice as hard to be recognized by faculty; women feel reluctant or unable to ask for any special support or help out of fear that the request would reinforce negative stereotypes about women.

Problems with Maintaining Relationships/Other Interests

This has most to do with the emotional strain, academic time pressures, and isolation of being a health profession student. Both male and female students feel cut off from friends not in training with them, and they experience problems in finding energy to devote to significant relationships and in lack of time to spend on other interests. While these problems were mentioned with equal emphasis by both men and women, for women the problems of isolation and being cut off from people outside of the training experience increases the difficulties they experience of being isolated within the training environment, too.

Competition and Academic Pressures

Only male students have expressed this as a concern in each profession, and it appears to be a central problem for them.

Feeling You Must Turn Off Your Emotions

Although related to double binds for women where expressing emotion is considered inappropriate as professional behavior, this is a specific issue that was raised by both men and women. Professional conduct and the pressures of dealing with many cases in a small amount of time demands a certain distancing on the part of the practitioner. Women and some men take issue with these demands because they feel it cuts off a part of them that is (and in their minds, should be) a part of their medical involvement.

Concern That The Training Process "Changes Who You Are"

Again, a concern shared by male and female students, this relates to all the ways in which they feel the professionalization process demands conformity to a single model of professional conduct and attributes.

Three Summary Checklists of Group Interview Issues follow. The first compares women's concerns among the eight MODVOPPP health professions included in this study; the second compares men's. The third compares men's and women's responses in this profession only.

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APPENDIX E

SUMMARY CHECKLIST OF FEMALE GROUP INTERVIEW ISSUES
COMPARATIVE MODVOPPP PROFESSIONS

	M	O	D	V	O	P	P.	P
STRUCTURAL FEATURES								
Lack of Role Models	•	•				•		•
Lack of Support Group of Women		•				•		•
Tracked into Limited Specialties/Options	•	•	•	•		•	•	
Balancing Work/Family	•	•	•	•	•	•	•	
Women's Disadvantage in Background or Size		•	•	•				
Social Problems	•							
ABSENCE OR INADEQUACY OF FACILITIES	•	•	•	•		•		
CHARACTERISTICS OF THE PROFESSION AND ITS WORK								
Life and Death Responsibility								
Relative Status of the Profession					•			•
ABSENCE OF OR DIFFICULTY IN GAINING ACCESS TO RESOURCES								
Lack of Encouragement and/or Information	•	•	•	•	•		•	•
Access to the Informal Network	•	•	•		•	•	•	•
Absence of Required Personal Attributes	•	•	•	•	•	•	•	•
Absence or Concern about Meeting Formal Requirements			•			•	•	
Access to Financing	•	•	•	•	•	•	•	
NEGATIVE ATTITUDES/BEHAVIORS OF OTHERS								
Incidents of Sexism	•	•	•	•	•	•	•	•
Resentment by Male Peers	•	•	•	•	•	•	•	
Client Prejudices	•	•	•	•	•	•	•	
Staff/Employee Prejudices	•		•			•	•	•
IMPACT ON SELF OF TRAINING								
Double Binds	•	•	•	•		•	•	•
Women Feel Must Work Harder	•	•	•	•	•	•	•	•
Problems with Maintaining Relationships	•	•	•	•		•		
Competition and Academic Pressures								
Feeling You Must Turn off Emotions	•	•	•					•
Concern That the Training Process Changes You	•							

FINAL REPORT: Osteopathic Medicine
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SUMMARY CHECKLIST OF MALE GROUP INTERVIEW ISSUES
COMPARATIVE MODVOPP PROFESSIONS

	M	O	D	V	O	P	P	P
STRUCTURAL FEATURES								
Lack of Role Models								
Lack of Support Group of Women								
Tracked into Limited Specialties/Options								
Balancing Work/Family								
Women's Disadvantage in Background or Size								
Social Problems								
ABSENCE OR INADEQUACY OF FACILITIES								
CHARACTERISTICS OF THE PROFESSION AND ITS WORK								
Life and Death Responsibility	•	•						
Relative Status of the Profession		•	•		•	•	•	•
ABSENCE OF OR DIFFICULTY IN GAINING ACCESS TO RESOURCES								
Lack of Encouragement and/or Information								•
Access to the Informal Network								
Absence of Required Personal Attributes								
Absence or Concern about Meeting Formal Requirements		•	•		•	•	•	•
Access to Financing	•	•	•	•		•	•	
NEGATIVE ATTITUDES/BEHAVIORS OF OTHERS								
Incidents of Sexism								
Resentment by Male Peers								
Client Prejudices								
Staff/Employee Prejudices								
IMPACT ON SELF OF TRAINING								
Double Binds								
Women Feel Must Work Harder								
Problems with Maintaining Relationships	•	•		•		•		
Competition and Academic Pressures	•	•	•	•		•	•	•
Feeling You Must Turn off Emotions								
Concern That the Training Process Changes You	•	•						

SUMMARY CHECKLIST OF GROUP INTERVIEW ISSUES

OSTEOPATHIC MEDICINE

	WOMEN	MEN
STRUCTURAL FEATURES		
Lack of Role Models	●	
Lack of Support Group of Women	●	
Tracked into Limited Specialties/Options	●	
Balancing Work/Family	●	
Women's Disadvantage in Background or Size	●	
Social Problems		
ABSENCE OR INADEQUACY OF FACILITIES	●	
CHARACTERISTICS OF THE PROFESSION AND ITS WORK		
Life and Death Responsibility		o
Relative Status of the Profession		o
ABSENCE OF OR DIFFICULTY IN GAINING ACCESS TO RESOURCES		
Lack of Encouragement and/or Information	●	
Access to the Informal Network	o	
Absence of Required Personal Attributes	●	
Absence or Concern about Meeting Formal Requirements		o
Access to Financing	o	o
NEGATIVE ATTITUDES/BEHAVIORS OF OTHERS		
Incidents of Sexism	o	
Resentment by Male Peers	o	
Client Prejudices	●	
Staff/Employee Prejudices		
IMPACT ON SELF OF TRAINING		
Double Binds	o	
Women Feel Must Work Harder	●	
Problems with Maintaining Relationships	●	o
Competition and Academic Pressures		o
Feeling you must Turn off Emotions	o	
Concern that the Training Process Changes You	●	●

APPENDIX F

SUMMARIES OF CHARACTERISTICS OF SCHOOLS AND INTERVIEW RESPONDENTS IN EIGHT MODVOPPP PROFESSIONS

SCHOOL VISIT SITE SELECTION BY CHARACTERISTICS

	# of Field Sites	Urban	Rural	North Central (1)	South	Northeast	West	Public	Private	Free-Standing	Univ. Affiliate	Physically Indep.	Medical Center	Part of Campus	High Status (2)	Low Status (2)	High % Women Enrolled (3)	Low % Women Enrolled (3)
Medicine	9	8	1	1	3	2	3	5	4	1	8	1	2	6	6	3	7	2
Osteo. Med. (4)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A	N/A	1	1
Dentistry	5	5	Ø	Ø	2	1	2	3	2	Ø	5	1	2	2	2	3	4	1
Vet. Med.	2	1	1	1	Ø	Ø	1	2	Ø	Ø	2	Ø	Ø	2	N/A	N/A	1	1
Optometry	2	2	Ø	Ø	Ø	1	1	1	1	1	1	1	Ø	1	1	1	1	1
Podiatry (4)	2	-	-	-	-	-	-	-	-	-	-	-	-	-	N/A	N/A	2	Ø
Pharmacy	3	3	Ø	Ø	Ø	1	2	1	2	1	2	1	1	1	1	2	2	1
Pub. Hlth.	2	2	Ø	Ø	1	Ø	1	1	1	Ø	2	1	Ø	1	2	Ø	2	Ø
TOTAL	27	21	2	2	6	5	10	13	10	3	20	5	5	13	N/A	N/A	20	7

(1) The four regions are comprised of the following states:

North Central: Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Idaho, Wisconsin, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, Wyoming.

South: District of Columbia, Maryland, West Virginia, Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia.

Northeast: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, Delaware, New Jersey, New York, Pennsylvania.

West: Arizona, New Mexico, Oklahoma, Texas, Colorado, Alaska, California, Hawaii, Nevada, Oregon, Washington

(2) Where known or applicable, status is defined as the degree of respect accorded a given institution by members of the same profession.

(3) Higher or lower than the national proportion of women enrolled by profession.

(4) This information has been intentionally omitted since the combination of characteristics might identify which schools were visited. Thus totals for site characteristics do not add to 27.

SUMMARY OF INDIVIDUAL INTERVIEWS

		Administrator Interviews															Faculty Interviews								
	# of Schools	Deans, Presidents, Chancellors			Asst. or Assoc. Deans			Affirmative Action (1)			Other Admin. (2)			Total Admin.			Pre-Clinical Faculty			Clinical Faculty			Total Faculty		
		M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Medicine	9	10	--	10	11	5	16	--	5(1)	5(1)	11	15	26	32	25	57	8	13	21	19	21	40	27	34	61
Osteo. Med.	2	3	--	3	4	--	4	--	--	--	4	1	5	11	1	12	5	--	5	4	6	10	9	6	15
Dentistry	5	5	--	5	13	--	13	--	--	--	1	4	5	19	4	23	5	3	8	16	5	21	21	8	29
Vet. Med.	2	1	--	1	4	--	4	--	1	1	3	2	5	8	3	11	2	2	4	9	5	14	11	7	18
Optometry	2	3	--	3	2	--	2	--	--	--	2	2	4	7	2	9	4	1	5	3	1	4	7	2	9
Podiatry	2	2	--	2	3	1	4	1	--	1	1	2	3	7	3	10	3	10	13	5	1	6	8	11	19
Pharmacy	3	3	--	3	6	--	6	--	--	--	5	6	11	14	6	20	4	3	7	5	4	9	10	7	17
Pub. Hlth. (5)	2	1	--	1	2	1	3	--	--	--	--	1	1	3	2	5	N/A	N/A	N/A	5	5	10	5	5	10
TOTALS	27	28	--	28	45	7	52	1	6	7	27	33	60	101	46	147	31	32	63	67	48	114	98	80	178

(1) Of the 5 Affirmative Action, 4 were university-wide and therefore covered, in three instances, dentistry, and in one instance, pharmacy, as well as medicine.

(2) Includes Registrars, Business Managers, Administrative Assistants, Directors of Special Programs, Centers, Institutes or Grants, Financial Aid Officers.

SUMMARY OF INDIVIDUAL INTERVIEWS (Continued)

Individual Student Interviews																		Intern & Resident Interviews									Total Respondents		
1st Year			2nd Year			3rd Year			4th Year			Unknown Or "Other" Students			Total Individual Students (3)			Site Admin.			Interns & Residents			Total Admin., Interns & Residents					
M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
6	21	27	4	13	17	2	9	11	1	5	6	2	13	15	15	61	76	3	1	4	9	11	20	12	12	24	86	132	218
3	3	6	1	2	3	2	4	6	--	1	1	--	--	--	6	10	16	←				N/A				→	26	17	43
1	7	8	5	9	14	1	--	1	2	7	9	4	1	5	13	24	37	1	--	1	--	2	2	1	1	2	54	37	91
5	4	9	2	5	7	--	4	4	--	2	2	--	1	1	7	16	23	1	--	1	2	3	5	3	3	6	29	29	58
--	4	4	1	5	6	3	2	5	1	5	6	--	--	--	5	16	21	←				N/A				→	19	20	39
--	1	1	--	2	2	1	2	3	4	2	6	--	--	--	5	7	12	1	--	1	3	--	3	4	--	4	24	21	45
--	1	1	--	5	5	1	7	8	1	2	3	6	7(4)	13(4)	8	22	30	←				N/A				→	32	35	66
6	7	13	--	--	--	--	--	--	--	--	--	--	--	--	6	7	13	1	--	1	2	4	6	3	4	7	17	18	35
21	48	69	13	41	54	10	28	38	9	24	33	12	22	34	65	163	228	7	--	7	16	20	36	23	20	43	287	309	595

(3) Male students were not a key respondent group in the study until after submission of the Interim Report at which time the study's focus was expanded to include them in greater numbers. The imbalance between male and female student interviews remains because URSA visited half of the schools in the study (14 of 27) prior to the Interim Report.

(4) Includes 1 fifth-year and 1 sixth-year student.

(5) Hospital Administration and Epidemiology faculty and students combined. Due to varying lengths of training programs, all Public Health students arbitrarily counted as first-year students.

MODVOPPP GROUP INTERVIEW SUMMARY

	Male		Female		Mixed		Total	
	# of Groups	Estimated Average N=7	# of Groups	Estimated Average N=7	# of Groups	Estimated Average N=8	# of Groups	Estimated Total
Medicine	4	28	13	91	--	--	17	119
Osteo. Med.	3	21	3	21	1	8	7	50
Dentistry	1	7	8	56	1	8	10	71
Vet. Med.	--	--	5	35	3	24	8	59
Optometry	2	14	3	21	1	8	6	43
Podiatry	1	7	2	14	--	--	3	21
Pharmacy	2	14	6	42	1	8	9	64
Pub. Hlth.	1	7	1	7	--	--	2	14
TOTAL	14	98	41	287	7	56	62	441